```
CC   the variation on the biological activity of CSF1R as well as on the
CC   binding affinity of candidate drugs targeting CSF1R. Antibodies are
CC   useful in a variety of diagnostic and prognostic formats and therapeutic
CC   methods. A transgenic animal is useful in studying expression of the
CC   CSF1R isogenes in vivo, for in vivo screening and testing of drugs
CC   targeted against CSF1R protein, and for testing the efficacy of
CC   therapeutic agents and compounds. Allele specific oligonucleotides (ASO)
CC   are useful as probes and primers, and for assaying a polymorphism in the
CC   target region. Without requiring any a priori knowledge of the phenotypic
CC   effect of any particular CSF1R or haplotype the invention provides a
CC   method for identifying lead compounds that are more likely to show
CC   efficacy in clinical trials. This sequence is an allele specific
CC   oligonucleotide probe used for detecting CSF1R gene polymorphisms,
CC   described in the method of the invention.
XX
SQ   Sequence 15 BP; 3 A; 7 C; 1 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   84.6%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1673 GGAACCCTGGTGT 1685
              |||| |:||||||
Db         14 GGAAACYTGGTGT 2


RESULT 366
ABK32117
ID   ABK32117 standard; DNA; 15 BP.
XX
AC   ABK32117;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human colon cancer SAGE tag #218.
XX
KW   Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW   serial analysis of gene expression; diagnostic; prognostic; probe;
KW   cancer marker; ss.
XX
OS   Homo sapiens.
XX
PN   US6333152-B1.
XX
PD   25-DEC-2001.
XX
PF   20-MAY-1998;   98US-0081646.
XX
PR   20-MAY-1998;   98US-0081646.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Zhang L,  Zhou W;
XX
DR   WPI; 2002-153821/20.
XX
PT   New human nucleic acid containing specific SAGE tags, useful as
PT   diagnostic markers for cancer, also derived probes  -
XX
PS   Disclosure; Column 28; 161pp; English.
XX
CC   The invention relates to an isolated, purified human nucleic acid (I)
CC   that has the same sequence as a mRNA found in humans and is a SAGE
CC   (serial analysis of gene expression) tag comprising a single stranded
CC   probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC   diagnostic and prognostic markers of cancer, especially of the colon and
CC   pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC   SAGE tags of the invention.
XX
SQ   Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1672 TGGAACCCTGG 1682
              ||||||||||
Db          3 TGGAACCCTGG 13


RESULT 367
ABK32754
ID   ABK32754 standard; DNA; 15 BP.
XX
AC   ABK32754;
XX
DT   23-APR-2002  (first entry)
XX
DE   Human colorectal and pancreatic cancer SAGE tag #121.
XX
KW   Human; colon cancer; colorectal cancer; pancreatic cancer; SAGE tag;
KW   serial analysis of gene expression; diagnostic; prognostic; probe;
KW   cancer marker; ss.
XX
OS   Homo sapiens.
XX
PN   US6333152-B1.
XX
PD   25-DEC-2001.
XX
PF   20-MAY-1998;   98US-0081646.
XX
PR   20-MAY-1998;   98US-0081646.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Vogelstein B,  Kinzler KW,  Zhang L,  Zhou W;
XX
DR   WPI; 2002-153821/20.
XX
PT   New human nucleic acid containing specific SAGE tags, useful as
PT   diagnostic markers for cancer, also derived probes  -
XX
PS   Disclosure; Column 93; 161pp; English.
XX
CC   The invention relates to an isolated, purified human nucleic acid (I)
CC   that has the same sequence as a mRNA found in humans and is a SAGE
CC   (serial analysis of gene expression) tag comprising a single stranded
CC   probe containing at least 10 consecutive nucleotides. SAGE tags, are
CC   diagnostic and prognostic markers of cancer, especially of the colon and
CC   pancreas. ABK31900-ABK32770 represent human colon and pancreatic cancer
CC   SAGE tags of the invention.
XX
SQ   Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1672 TGGAACCCTGG 1682
              ||||||||||
Db          3 TGGAACCCTGG 13


RESULT 368
AAQ74120/c
ID   AAQ74120 standard; DNA; 14 BP.
XX
AC   AAQ74120;
XX
DT   02-FEB-1996  (first entry)
XX
DE   Platelet derived growth factor (PDGF-A) antisense oligonuclectide.
XX
KW   Platelet derived growth factor; PDGF-A; antisense oligonucleotide;
KW   breast; pancreatic; carcinoma; glioma; melanoma; rheumatoid;
```

XX
DR WPI; 2002-489997/52.
XX
PT Novel genetic variants of cholinergic receptor muscarinic 4 useful in
PT studying expression and function of protein, and for screening drugs to
PT treat diseases e.g. Alzheimer's disease and other neurological
PT disorders -
XX
PS Claim 14; Page 13; 63pp; English.
XX
CC The present invention relates to novel single nucleotide polymorphisms
CC (SNPs) in the human cholinergic receptor, muscarinic 4 (CHRM4) gene
CC located on chromosome 11p12-p11.2, and methods for haplotyping and/or
CC genotyping the CHRM4 gene. The methods of the invention make use of
CC allele-specific oligonucleotides (ASOs) as probes and primers and/or
CC primer-extension oligonucleotides for detecting the CHRM4 gene
CC polymorphisms. The polynucleotides and screened compounds are useful
CC for the treatment of diseases associated with CHRM4 activity, such as
CC Alzheimer's disease and other neurological disorders.
CC ABK92564-ABK92575 represent ASO primers for detecting human CHRM4 gene
CC polymorphisms.
XX
SQ Sequence 15 BP; 3 A; 5 C; 5 G; 1 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 15;
Best Local Similarity 84.6%; Pred. No. 3.1e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1658 ACCAGGCTCACAG 1670
||||||| |||:|
Db 3 ACCAGGCGCACRG 15

RESULT 364
ABK92619
ID ABK92619 standard; DNA; 15 BP.
XX
AC ABK92619;
XX
DT 20-AUG-2002 (first entry)
XX
DE ASO primer #17 to detect human ADORA3 gene polymorphisms.
XX
KW Human; single nucleotide polymorphism; SNP; ADORA3; haplotyping;
KW chromosome 1p21-p13; adenosine A3 receptor; genotyping;
KW pathophysiological heart condition; myocardial ischaemia;
KW chronic heart failure; allele-specific oligonucleotide; ASO;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO200236610-A2.
XX
PD 10-MAY-2002.
XX
PF 31-OCT-2001; 2001WO-US45718.
XX
PR 31-OCT-2000; 2000US-244626P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Gilson CR, Kazemi A, Koshy B, Monroe G;
XX
DR WPI; 2002-489998/52.
XX
PT Novel genetic variants of the adenosine A3 receptor, useful
PT therapeutically and in screening for drugs to treat diseases related to
PT ADORA3 activity e.g., myocardial ischaemia and chronic heart failure -
XX
PS Claim 15; Page 14; 82pp; English.
XX
CC The present invention relates to novel single nucleotide polymorphisms
CC (SNPs) in the human adenosine A3 receptor (ADORA3) gene located on
CC chromosome 1p21-p13, and methods for haplotyping and/or genotyping
CC the ADORA3 gene. The methods of the invention make use of
CC allele-specific oligonucleotides (ASOs) as probes and primers and/or
CC primer-extension oligonucleotides for detecting the ADORA3 gene
CC polymorphisms. The polynucleotides and screened compounds are useful
CC for the treatment of diseases associated with ADORA3 activity, such as
CC pathophysiological conditions of the heart e.g. myocardial ischaemia
CC and chronic heart failure. ABK92603-ABK92628 represent ASO primers for
CC detecting human ADORA3 gene polymorphisms.
XX
SQ Sequence 15 BP; 2 A; 6 C; 4 G; 2 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 3.1e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1759 AGGCCCACTGG 1769
||||||||||
Db 2 AGGCCCACTGG 12

RESULT 365
AAS98658/c
ID AAS98658 standard; DNA; 15 BP.
XX
AC AAS98658;
XX
DT 26-MAR-2002 (first entry)
XX
DE Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #24.
XX
KW Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;
KW cytostatic; gene therapy; malignant histiocytosis; isogene;
KW myeloid malignancy; inflammatory disorder; transgenic animal;
KW haplotype; genotype; human; allele specific oligonucleotide; ASO;
KW probe; ss.
XX
OS Homo sapiens.
XX
PN WO200179225-A2.
XX
PD 25-OCT-2001.
XX
PF 12-APR-2001; 2001WO-US12044.
XX
PR 12-APR-2000; 2000US-196411P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Chew A, Choi JY, Koshy B;
XX
DR WPI; 2002-075058/10.
XX
PT Novel polymorphic variants of colony stimulating factor 1 receptor
PT useful in studying expression and function of the protein, useful for
PT screening candidate drugs to treat diseases e.g. inflammatory disorders
PT -
XX
PS Claim 15; Page 15; 164pp; English.
XX
CC The invention describes a novel isolated polynucleotide (I) comprising a
CC sequence which is a polymorphic variant (PV) of a reference sequence for
CC colony stimulating factor 1 receptor (CSF1R) gene, found on The
CC polypeptide are useful for improving the discovery and development of
CC drugs for treating diseases associated with CSF1R activity, e.g.,
CC malignant histiocytosis, myeloid malignancies, and inflammatory disorders
CC and the haplotypes can be used to validate CSF1R as a candidate target
CC for treating a specific condition or disease predicted to be associated
CC with CSF1R activity. Genotyping the CSF1R gene of an individual can also
CC be used in developing diagnostic tests and therapeutic treatments. (I) is
CC useful in studying the expression and function of CSF1R, and in
CC expressing CSF1R protein for use in screening for candidate drugs to
CC treat diseases related to CSF1R activity and in studying the effect of

XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 8; Page 71; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 5 A; 3 C; 5 G; 2 T; 0 other;

```
  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1667 ACAGCTGGAAC 1677
              ||||||||||
Db          1 ACAGCTGGAAC 11
```

RESULT 362
AAL39485/c
ID AAL39485 standard; DNA; 15 BP.
XX
AC AAL39485;
XX
DT 05-SEP-2002 (first entry)
XX
DE CCBP2 detecting ASO probe SEQ ID No 12.
XX
KW Chemokine binding protein 2; CCBP2; CCBP2 protein isoform; gene therapy;
KW polymorphic gene variant; single nucleotide polymorphism; human; probe;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200232926-A2.
XX
PD 25-APR-2002.
XX
PF 12-OCT-2001; 2001WO-US42685.
XX
PR 12-OCT-2000; 2000US-239638P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Armstrong B, Kazemi A, Koshy B;
XX
DR WPI; 2002-435524/46.
XX
PT New genetic variants having polymorphisms in the chemokine binding
PT protein 2 (CCBP2) gene, useful for studying CCBP2 functions, and for
PT treating disorders affected by expression or function of the CCBP2
PT isogene -
XX
PS Claim 14; Page 13; 84pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising genes and
CC haplotypes of the chemokine binding protein 2 (CCBP2) gene. Polymorphic
CC variants of the CCBP2 gene are useful in studying the expression and
CC function of CCBP2, and in expressing CCBP2 proteins for use in screening
CC candidate drugs for treating diseases associated with CCBP2 activity.
CC Polynucleotides comprising a polymorphic gene variant or fragment may be
CC used for therapeutic purposes, where a patient could benefit from
CC expression or increased expression of a particular CCBP2 protein isoform,
CC or an expression vector encoding the isoform may be administered to the
CC patient. Haplotype information is useful in improving the efficiency and
CC output of several steps in drug discovery and development process,
CC including target validation, identifying lead compounds, and early phase
CC clinical trials. The polynucleotides of the invention can be used to
CC treat disorders related to the CCBP2 gene by gene therapy. This
CC polynucleotide sequence represents a preferred ASO probe for detecting
CC CCBP2 gene polymorphisms relating to the invention.
XX
SQ Sequence 15 BP; 0 A; 5 C; 5 G; 4 T; 1 other;

```
  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   84.6%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1659 CCAGGCTCACAGC 1671
              |||||: ||||||
Db         13 CCAGGSACACAGC 1
```

RESULT 363
ABK92567
ID ABK92567 standard; DNA; 15 BP.
XX
AC ABK92567;
XX
DT 20-AUG-2002 (first entry)
XX
DE ASO primer #4 to detect human CHRM4 gene polymorphisms.
XX
KW Human; single nucleotide polymorphism; SNP; CHRM4; haplotyping;
KW chromosome 11p12-p11.2; cholinergic receptor muscarinic 4;
KW genotyping; Alzheimer's disease; neurological disorder;
KW allele-specific oligonucleotide; ASO; primer; ss.
XX
OS Homo sapiens.
XX
PN WO200236609-A2.
XX
PD 10-MAY-2002.
XX
PF 31-OCT-2001; 2001WO-US45709.
XX
PR 31-OCT-2000; 2000US-244627P.
XX
PA (GENA-) GENAISSANCE PHARM INC.
PA (PETE/) PETERSON N.
PA (ROUN/) ROUNDS E.
XX
PI Denton RR, Duda A, Gilson CR, Kazemi A, Nandabalan K, Tirrell C;

```
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 6 A; 4 C; 3 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1667 ACAGCTGGAAC 1677
             ||||||||||| |
Db          3 ACAGCTGGAAC 13


RESULT 360
AAF50724
ID   AAF50724 standard; DNA; 15 BP.
XX
AC   AAF50724;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1684.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 6 A; 3 C; 4 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1667 ACAGCTGGAAC 1677
             ||||||||||| |
Db          2 ACAGCTGGAAC 12


RESULT 361
AAF50725
ID   AAF50725 standard; DNA; 15 BP.
XX
AC   AAF50725;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1685.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
```

```
ID   AAF50721 standard; DNA; 15 BP.
XX
AC   AAF50721;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1681.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 5 C; 3 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1667 ACAGCTGGAAC 1677
             ||||||||||
Db          5 ACAGCTGGAAC 15


RESULT 358
AAF50722
ID   AAF50722 standard; DNA; 15 BP.
XX
AC   AAF50722;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1682.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 71; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 6 A; 5 C; 3 G; 1 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1667 ACAGCTGGAAC 1677
             ||||||||||
Db          4 ACAGCTGGAAC 14


RESULT 359
AAF50723
ID   AAF50723 standard; DNA; 15 BP.
XX
AC   AAF50723;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #1683.
XX
```

```
CC   AAX30947-31815 represent tag sequences of transcripts that are
CC   differentially expressed in colorectal cancer, in pancreatic
CC   cancer, or in both. The tag sequences can be used to identify
CC   genes by matching the tag to a gen data base member, or by using
CC   the tag sequences as probes to isolate unidentified genes from
CC   cDNA libraries. The tag sequences can also be used in a method
CC   for diagnosing colon or pancreatic cancer in a sample suspected
CC   of being neoplastic. The method comprises comparing the level of
CC   at least one transcript in a first sample of a tissue to a second
CC   sample, where the first sample is a colonic tissue suspected of
CC   being neoplastic and the second sample is a normal human colonic
CC   tissue. The transcript is identified by a tag selected from
CC   AAX30947-31815. The methods of the invention can be used in the
CC   diagnosis, prognosis and treatment of cancer.
XX
SQ   Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1672 TGGAACCCTGG 1682
             ||||||||||| |
Db          3 TGGAACCCTGG 13


RESULT 355
AAX31164
ID   AAX31164 standard; DNA; 15 BP.
XX
AC   AAX31164;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Tag sequence of a transcript increased in colorectal cancer.
XX
KW   Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW   diagnosis; prognosis; treatment; ss.
XX
OS   Homo sapiens.
XX
PN   WO9853319-A2.
XX
PD   26-NOV-1998.
XX
PF   20-MAY-1998;   98WO-US10277.
XX
PR   21-MAY-1997;   97US-0047352.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Kinzler KW,  Vogelstein B;
XX
DR   WPI; 1999-070161/06.
XX
PT   Use of isolated gene transcripts - useful for developing products
PT   for the diagnosis, prognosis and treatment of cancers, particularly
PT   colon and pancreatic cancer
XX
PS   Claim 2; Page 33; 120pp; English.
XX
CC   AAX30947-31815 represent tag sequences of transcripts that are
CC   differentially expressed in colorectal cancer, in pancreatic
CC   cancer, or in both. The tag sequences can be used to identify
CC   genes by matching the tag to a gen data base member, or by using
CC   the tag sequences as probes to isolate unidentified genes from
CC   cDNA libraries. The tag sequences can also be used in a method
CC   for diagnosing colon or pancreatic cancer in a sample suspected
CC   of being neoplastic. The method comprises comparing the level of
CC   at least one transcript in a first sample of a tissue to a second
CC   sample, where the first sample is a colonic tissue suspected of
CC   being neoplastic and the second sample is a normal human colonic
CC   tissue. The transcript is identified by a tag selected from
CC   AAX30947-31815. The methods of the invention can be used in the
CC   diagnosis, prognosis and treatment of cancer.
XX
SQ   Sequence 15 BP; 4 A; 4 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1672 TGGAACCCTGG 1682
             ||||||||||| |
Db          3 TGGAACCCTGG 13


RESULT 356
AAI67293/c
ID   AAI67293 standard; DNA; 15 BP.
XX
AC   AAI67293;
XX
DT   11-FEB-2002  (first entry)
XX
DE   Human FKBP8 allele-specific oligonucleotide (ASO) probe.
XX
KW   FK506-binding protein 8; FKBP8; haplotyping; polymorphism; cancer; ss;
KW   immunosuppression; human; allele-specific oligonucleotide; ASO; probe.
XX
OS   Homo sapiens.
XX
PN   WO200172965-A2.
XX
PD   04-OCT-2001.
XX
PF   26-MAR-2001; 2001WO-US09718.
XX
PR   24-MAR-2000; 2000US-192125P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Anastasio AE,  Bentivegna SC,  Choi JY,  Kliem SE,  Koshy B;
PI   Stephens JC;
XX
DR   WPI; 2001-626261/72.
XX
PT   New haplotypes of the FK506-binding protein 8 gene, useful for
PT   genotyping that gene in individual and to design new therapy for
PT   associated disease such as immunosuppression and cancer  -
XX
PS   Claim 15; Page 13; 98pp; English.
XX
CC   The invention relates to haplotyping the FK506-binding protein 8 (38kD)
CC   (FKBP8) gene in an individual. The method involves determining the
CC   identity of the nucleotide pair at one or more polymorphic sites selected
CC   from P1 to P26 ( described in the specification). The invention is useful
CC   to improve the efficiency and reliability of several steps in the
CC   discovery and development of drugs for treating diseases associated with
CC   FKBP8 activity, for example immunosuppression and cancer. Sequences
CC   AAI67274-299 represent allele-specific oligonucleotide (ASO) probes for
CC   detecting FKBP8 gene polymorphisms.
XX
SQ   Sequence 15 BP; 2 A; 7 C; 4 G; 1 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   84.6%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1673 GGAACCCTGGTGT 1685
              || |||:|||||
Db         15 GGCACCCYGGTGT 3


RESULT 357
AAF50721
```

```
KW   Selective base pair; steric hindrance; static repulsion; ss.
XX
OS   Synthetic.
XX
PN   WO200105801-A1.
XX
PD   25-JAN-2001.
XX
PF   14-JUL-2000; 2000WO-JP04720.
XX
PR   15-JUL-1999;   99JP-0201450.
PR   02-MAY-2000; 2000JP-0133519.
XX
PA   (NISC-) JAPAN SCI & TECHNOLOGY CORP.
XX
PI   Hirao I,  Ishikawa M,  Fujihara T,  Yokoyama S;
XX
DR   WPI; 2001-147320/15.
XX
PT   Non-natural nucleic acid base pair recognised by polymerases for
PT   production of artificial genes for treatment of genetic disorders -
XX
PS   Disclosure; Page 14; 64pp; Japanese.
XX
CC   This invention relates to a non-natural selective base pair for nucleic
CC   acids produced by introducing to a nucleic acid base a group imparting
CC   steric hindrance to pairing with the counter-base, static repulsion and
CC   a stacking effect. The non-natural selective base pair can be used in
CC   the production of non-natural genes and their use in the production of
CC   proteins containing non-natural amino acids. The production of nucleic
CC   acids for treatment of genetic disorders. Oligonucleotides
CC   AAF29385 - AAF29398 represent template and primer sequences used in an
CC   example illustrating the invention.
XX
SQ   Sequence 14 BP; 5 A; 1 C; 6 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 14;
  Best Local Similarity   100.0%;  Pred. No. 2.8e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1743 CTCCTCCCTAT 1753
                ||||||||||
Db         13 CTCCTCCCTAT 3


RESULT 353
AAV31919
ID   AAV31919 standard; DNA; 15 BP.
XX
AC   AAV31919;
XX
DT   21-AUG-1998  (first entry)
XX
DE   Peptide nucleic acid probe 62.
XX
KW   Peptide nucleic acid; PNA; probe; hybridisation; mycobacteria;
KW   ribosomal nucleic acid; rRNA; drug-resistant strain; mutation; ss.
XX
OS   Synthetic.
OS   Mycobacterium sp.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..15
FT                    /*tag=  a
FT                    /note= "This sequence contains a polyamide backbone
FT                           instead of a deoxyribose backbone"
XX
PN   WO9815648-A1.
XX
PD   16-APR-1998.
XX
PF   03-OCT-1997;   97WO-DK00425.
XX
PR   05-MAY-1997;   97DK-0000512.
PR   04-OCT-1996;   96DK-0001096.
PR   18-OCT-1996;   96DK-0001156.
XX
PA   (DAKO-) DAKO AS.
XX
PI   Lund K,  Mollerup TA,  Stender H;
XX
DR   WPI; 1998-240831/21.
XX
PT   Peptide nucleic acid probes for detection of ribosomal nucleic acid
PT   of mycobacteria - allow differentiation between species of
PT   tuberculosis complex and others and can penetrate cell membranes
PT   without pretreatment
XX
PS   Claim 22; Page 66; 106pp; English.
XX
CC   This is the nucleotide sequence of the peptide nucleic acid (PNA)
CC   probe used in the method of the invention, to detect ribosomal
CC   nucleic acid of mycobacteria.  The probes are used, in situ or in
CC   vitro, for detection of the Mycobacterium tuberculosis complex (MTC),
CC   specifically M. tuberculosis, and especially in sputum samples, but
CC   also in other body fluids, biopsy specimens, foods, soil, air and water.
CC   Particularly, they are used to diagnose, stage or monitor infection,
CC   or for identification of drug-resistant strains (which generally have
CC   mutations in rRNA).
XX
SQ   Sequence 15 BP; 2 A; 6 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 15;
  Best Local Similarity   100.0%;  Pred. No. 3.1e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1759 AGGCCCACTGG 1769
                ||||||||||
Db          4 AGGCCCACTGG 14


RESULT 354
AAX31800
ID   AAX31800 standard; DNA; 15 BP.
XX
AC   AAX31800;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Transcript tag sequence increased in pancreatic and colorectal cancer.
XX
KW   Tag sequence; colorectal cancer; pancreatic cancer; colon cancer;
KW   diagnosis; prognosis; treatment; ss.
XX
OS   Homo sapiens.
XX
PN   WO9853319-A2.
XX
PD   26-NOV-1998.
XX
PF   20-MAY-1998;   98WO-US10277.
XX
PR   21-MAY-1997;   97US-0047352.
XX
PA   (UYJO ) UNIV JOHNS HOPKINS.
XX
PI   Kinzler KW,  Vogelstein B;
XX
DR   WPI; 1999-070161/06.
XX
PT   Use of isolated gene transcripts - useful for developing products
PT   for the diagnosis, prognosis and treatment of cancers, particularly
PT   colon and pancreatic cancer
XX
PS   Disclosure; Page 79; 120pp; English.
XX
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```
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1748 CCCTATCCTAA 1758
             ||||||||||| |
Db         2 CCCTATCCTAA 12


RESULT 350
ABH35638
ID   ABH35638 standard; DNA; 13 BP.
XX
AC   ABH35638;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 235615 for detecting SNP TSC0057525.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 235615; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1707 TGGGTTAGGAG 1717
             ||||||||||| |
Db         1 TGGGTTAGGAG 11


RESULT 351
ABH35639/c
ID   ABH35639 standard; DNA; 13 BP.
XX
AC   ABH35639;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 235616 for detecting SNP TSC0057525.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 235616; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1707 TGGGTTAGGAG 1717
             ||||||||||| |
Db        13 TGGGTTAGGAG 3


RESULT 352
AAF29395/c
ID   AAF29395 standard; DNA; 14 BP.
XX
AC   AAF29395;
XX
DT   27-APR-2001  (first entry)
XX
DE   Oligonucleotide primer 2 DNA sequence.
XX
```

```
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 230506; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 0 G; 2 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1724 GATGGAGATTGGC 1736
              ||||||| |||| :
Db         13 GATGGAGTTTGGY 1


RESULT 348
ABH31314/c
ID   ABH31314 standard; DNA; 13 BP.
XX
AC   ABH31314;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 231291 for detecting SNP TSC0056398.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 231291; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1748 CCCTATCCTAA 1758
              ||||||||||| 
Db         12 CCCTATCCTAA 2


RESULT 349
ABH31315
ID   ABH31315 standard; DNA; 13 BP.
XX
AC   ABH31315;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 231292 for detecting SNP TSC0056398.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 231292; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
```

```
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1700 TGGAAGTTGGGTT 1712
              ||||||| ||||:
Db          1 TGGAAGTAGGGTY 13


RESULT 345
ABH22017/c
ID   ABH22017 standard; DNA; 13 BP.
XX
AC   ABH22017;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 221994 for detecting SNP TSC0054021.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 221994; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1700 TGGAAGTTGGGTT 1712
              ||||||| ||||:
Db         13 TGGAAGTAGGGTY 1


RESULT 346
ABH30528
ID   ABH30528 standard; DNA; 13 BP.
XX
AC   ABH30528;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 230505 for detecting SNP TSC0056222.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 230505; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 6 G; 4 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1724 GATGGAGATTGGC 1736
              ||||||| ||||:
Db          1 GATGGAGTTTGGY 13


RESULT 347
ABH30529/c
ID   ABH30529 standard; DNA; 13 BP.
XX
AC   ABH30529;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 230506 for detecting SNP TSC0056222.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
```

PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 221105; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 0 C; 6 G; 3 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1737 TCCCAACTCCT 1747
||||||||||||
Db 11 TCCCAACTCCT 1

RESULT 343
ABH21129
ID ABH21129 standard; DNA; 13 BP.
XX
AC ABH21129;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 221106 for detecting SNP TSC0053805.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 221106; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 6 C; 0 G; 3 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1737 TCCCAACTCCT 1747
||||||||||||
Db 3 TCCCAACTCCT 13

RESULT 344
ABH22016
ID ABH22016 standard; DNA; 13 BP.
XX
AC ABH22016;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 221993 for detecting SNP TSC0054021.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 221993; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 0 C; 6 G; 3 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;

```
RESULT 340
ABH19250
ID   ABH19250 standard; DNA; 13 BP.
XX
AC   ABH19250;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 219227 for detecting SNP TSC0053301.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 219227; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 1 C; 6 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1715 GAGTACGGAGA 1725
             ||||||||||||
Db          2 GAGTACGGAGA 12


RESULT 341
ABH19251/c
ID   ABH19251 standard; DNA; 13 BP.
XX
AC   ABH19251;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 219228 for detecting SNP TSC0053301.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 219228; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 6 C; 1 G; 4 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1715 GAGTACGGAGA 1725
             ||||||||||||
Db          12 GAGTACGGAGA 2


RESULT 342
ABH21128/c
ID   ABH21128 standard; DNA; 13 BP.
XX
AC   ABH21128;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 221105 for detecting SNP TSC0053805.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
```

```
PS   Claim 1; SEQ ID 205384; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 7 C; 1 G; 1 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1694 GCGTGGTGGAAGT 1706
              ||||||||| ||:
Db         13 GCGTGGTGGTAGY 1


RESULT 338
ABH08492
ID   ABH08492 standard; DNA; 13 BP.
XX
AC   ABH08492;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 208469 for detecting SNP TSC0050942.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 208469; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1698 GGTGGAAGTTG 1708
              ||||||||||| 
Db          1 GGTGGAAGTTG 11


RESULT 339
ABH08493/c
ID   ABH08493 standard; DNA; 13 BP.
XX
AC   ABH08493;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 208470 for detecting SNP TSC0050942.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 208470; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1698 GGTGGAAGTTG 1708
              ||||||||||| 
Db         13 GGTGGAAGTTG 3
```

DE Oligonucleotide SEQ ID NO 201562 for detecting SNP TSC0049571.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 201562; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1736 CTCCCAACTCC 1746
||||||||||
Db 3 CTCCCAACTCC 13

RESULT 336
ABH05406
ID ABH05406 standard; DNA; 13 BP.
XX
AC ABH05406;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 205383 for detecting SNP TSC0050352.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 205383; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 1 A; 1 C; 7 G; 3 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1694 GCGTGGTGGAAGT 1706
||||||||| ||:
Db 1 GCGTGGTGGTAGY 13

RESULT 337
ABH05407/c
ID ABH05407 standard; DNA; 13 BP.
XX
AC ABH05407;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 205384 for detecting SNP TSC0050352.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX

```
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 4 G; 6 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1749 CCTATCCTAAA 1759
             ||||||||||| 
Db         13 CCTATCCTAAA 3


RESULT 333
ABF98563
ID   ABF98563 standard; DNA; 13 BP.
XX
AC   ABF98563;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 198560 for detecting SNP TSC0048863.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 198560; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 4 C; 0 G; 3 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1749 CCTATCCTAAA 1759
             ||||||||||| 
Db         1 CCTATCCTAAA 11


RESULT 334
ABH01584/c
ID   ABH01584 standard; DNA; 13 BP.
XX
AC   ABH01584;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 201561 for detecting SNP TSC0049571.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 201561; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCC 1746
             ||||||||||| 
Db         11 CTCCCAACTCC 1


RESULT 335
ABH01585
ID   ABH01585 standard; DNA; 13 BP.
XX
AC   ABH01585;
XX
DT   22-FEB-2002  (first entry)
XX
```

PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 186037; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 1 C; 7 G; 1 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1714 GGAGTACGGAG 1724
||||||||||
Db 1 GGAGTACGGAG 11

RESULT 331
ABF86041/c
ID ABF86041 standard; DNA; 13 BP.
XX
AC ABF86041;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 186038 for detecting SNP TSC0045841.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 186038; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 1 A; 7 C; 1 G; 3 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1714 GGAGTACGGAG 1724
||||||||||
Db 13 GGAGTACGGAG 3

RESULT 332
ABF98562/c
ID ABF98562 standard; DNA; 13 BP.
XX
AC ABF98562;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 198559 for detecting SNP TSC0048863.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 198559; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The

```
  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGAT 1732
             ||||||||||| |
Db         12 GAGATGGAGAT 2


RESULT 328
ABF84270
ID   ABF84270 standard; DNA; 13 BP.
XX
AC   ABF84270;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 184267 for detecting SNP TSC0006682.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 184267; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 4 G; 4 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1723 AGATGGAGATT 1733
             ||||||||||| |
Db          3 AGATGGAGATT 13


RESULT 329
ABF84271/c
ID   ABF84271 standard; DNA; 13 BP.
XX
AC   ABF84271;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 184268 for detecting SNP TSC0006682.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 184268; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 4 C; 0 G; 5 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1723 AGATGGAGATT 1733
             ||||||||||| |
Db          11 AGATGGAGATT 1


RESULT 330
ABF86040
ID   ABF86040 standard; DNA; 13 BP.
XX
AC   ABF86040;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 186037 for detecting SNP TSC0045841.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
```

```
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 135840; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 5 C; 1 G; 4 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
              |||||| |||||:
Db         13 GGAGATCGAGATY 1


RESULT 326
ABF46426
ID   ABF46426 standard; DNA; 13 BP.
XX
AC   ABF46426;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 146423 for detecting SNP TSC0036912.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 146423; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGAT 1732
              ||||||||||:
Db          2 GAGATGGAGAT 12


RESULT 327
ABF46427/c
ID   ABF46427 standard; DNA; 13 BP.
XX
AC   ABF46427;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 146424 for detecting SNP TSC0036912.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 146424; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 other;
```

RESULT 323
ABF35841/c
ID ABF35841 standard; DNA; 13 BP.
XX
AC ABF35841;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 135838 for detecting SNP TSC0033923.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 135838; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 5 C; 0 G; 4 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1721 GGAGATGGAGATT 1733
||||||:|||||
Db 13 GGAGATTGAGATY 1

RESULT 324
ABF35842
ID ABF35842 standard; DNA; 13 BP.
XX
AC ABF35842;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 135839 for detecting SNP TSC0033923.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 135839; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 1 C; 5 G; 2 T; 1 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 84.6%; Pred. No. 2.5e+02;
Matches 11; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1721 GGAGATGGAGATT 1733
||||||:|||||
Db 1 GGAGATCGAGATY 13

RESULT 325
ABF35843/c
ID ABF35843 standard; DNA; 13 BP.
XX
AC ABF35843;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 135840 for detecting SNP TSC0033923.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX

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PT   methylation status  -
XX
PS   Claim 1; SEQ ID 128973; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 1 C; 7 G; 3 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1735 GCTCCCAACTC 1745
             ||||||||||| 
Db         12 GCTCCCAACTC 2


RESULT 321
ABF28977
ID   ABF28977 standard; DNA; 13 BP.
XX
AC   ABF28977;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 128974 for detecting SNP TSC0032287.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 128974; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 7 C; 1 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1735 GCTCCCAACTC 1745
             ||||||||||| 
Db          2 GCTCCCAACTC 12


RESULT 322
ABF35840
ID   ABF35840 standard; DNA; 13 BP.
XX
AC   ABF35840;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 135837 for detecting SNP TSC0033923.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 135837; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
             |||||| ||||:
Db          1 GGAGATTGAGATY 13
```

```
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 122695 for detecting SNP TSC0030668.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 122695; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 8 G; 0 U; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1742 ACTCCTCCCTATC 1754
              :||||||||| ||
Db         13 RCTCCTCCCTCTC 1


RESULT 319
ABF22699
ID   ABF22699 standard; DNA; 13 BP.
XX
AC   ABF22699;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 122696 for detecting SNP TSC0030668.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 122696; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 0 A; 8 C; 0 G; 4 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1742 ACTCCTCCCTATC 1754
              :||||||||| ||
Db         13 RCTCCTCCCTCTC 1


RESULT 320
ABF28976/c
ID   ABF28976 standard; DNA; 13 BP.
XX
AC   ABF28976;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 128973 for detecting SNP TSC0032287.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
```

```
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1697 TGGTGGAAGTT 1707
              ||||||||||| 
Db         11 TGGTGGAAGTT 1


RESULT 316
ABF15420
ID   ABF15420 standard; DNA; 13 BP.
XX
AC   ABF15420;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115417 for detecting SNP TSC0028927.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115417; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 1 C; 6 G; 2 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1694 GCGTGGTGGAA 1704
              ||||||||||| 
Db          1 GCGTGGTGGAA 11


RESULT 317
ABF15421/c
ID   ABF15421 standard; DNA; 13 BP.
XX
AC   ABF15421;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115418 for detecting SNP TSC0028927.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115418; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 6 C; 1 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1694 GCGTGGTGGAA 1704
              ||||||||||| 
Db         13 GCGTGGTGGAA 3


RESULT 318
ABF22698/c
ID   ABF22698 standard; DNA; 13 BP.
XX
AC   ABF22698;
XX
```

```
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 82538; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 5 C; 0 G; 4 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1741 AACTCCTCCCTAT 1753
              :|||||| |||||
Db          1 RACTCCTACCTAT 13


RESULT 314
ABF15180
ID   ABF15180 standard; DNA; 13 BP.
XX
AC   ABF15180;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115177 for detecting SNP TSC0028862.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115177; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1697 TGGTGGAAGTT 1707
              |||||||||||
Db          3 TGGTGGAAGTT 13


RESULT 315
ABF15181/c
ID   ABF15181 standard; DNA; 13 BP.
XX
AC   ABF15181;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115178 for detecting SNP TSC0028862.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115178; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
```

```
XX
SQ   Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGA 1731
             ||||||||||
Db          1 GGAGATGGAGA 11


RESULT 311
ABC61029/c
ID   ABC61029 standard; DNA; 13 BP.
XX
AC   ABC61029;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 61046 for detecting SNP TSC0016265.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 61046; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGA 1731
             ||||||||||
Db         13 GGAGATGGAGA 3


RESULT 312
ABC82520/c
ID   ABC82520 standard; DNA; 13 BP.
XX
AC   ABC82520;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 82537 for detecting SNP TSC0020824.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 82537; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1741 AACTCCTCCCTAT 1753
              :|||||| |||||
Db         13 RACTCCTACCTAT 1


RESULT 313
ABC82521
ID   ABC82521 standard; DNA; 13 BP.
XX
AC   ABC82521;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 82538 for detecting SNP TSC0020824.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 46651; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 0 C; 6 G; 3 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1741 AACTCCTCCCT 1751
||||||||||||
Db 13 AACTCCTCCCT 3

RESULT 309
ABC46635
ID ABC46635 standard; DNA; 13 BP.
XX
AC ABC46635;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 46652 for detecting SNP TSC0013461.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 46652; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 2.5e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1741 AACTCCTCCCT 1751
||||||||||||
Db 1 AACTCCTCCCT 11

RESULT 310
ABC61028
ID ABC61028 standard; DNA; 13 BP.
XX
AC ABC61028;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 61045 for detecting SNP TSC0016265.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 61045; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

```
                 ||||||||||||
Db          12 GAGATGGAGAT 2


RESULT 306
ABC37622/c
ID   ABC37622 standard; DNA; 13 BP.
XX
AC   ABC37622;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 37639 for detecting SNP TSC0011712.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 37639; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 8 G; 1 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1745 CCTCCCTATCC 1755
                ||||||||||||
Db         12 CCTCCCTATCC 2


RESULT 307
ABC37623
ID   ABC37623 standard; DNA; 13 BP.
XX
AC   ABC37623;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 37640 for detecting SNP TSC0011712.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 37640; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 8 C; 0 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1745 CCTCCCTATCC 1755
                ||||||||||||
Db          2 CCTCCCTATCC 12


RESULT 308
ABC46634/c
ID   ABC46634 standard; DNA; 13 BP.
XX
AC   ABC46634;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 46651 for detecting SNP TSC0013461.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
```

```
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 21720; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
              |||| ||||||| :
Db         13 GGAGTTGGAGATY 1


RESULT 304
ABC33136
ID   ABC33136 standard; DNA; 13 BP.
XX
AC   ABC33136;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 33153 for detecting SNP TSC0010569.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 33153; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 6 A; 0 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGAT 1732
              ||||||||||| 
Db          2 GAGATGGAGAT 12


RESULT 305
ABC33137/c
ID   ABC33137 standard; DNA; 13 BP.
XX
AC   ABC33137;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 33154 for detecting SNP TSC0010569.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 33154; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 5 C; 0 G; 6 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGAT 1732
```

```
AC   ABI81002;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 380975 for detecting SNP TSC0064086.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 380975; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 4 A; 5 C; 0 G; 3 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1724 GATGGAGATTG 1734
             |||||||||||
Db         12 GATGGAGATTG 2


RESULT 302
ABC21702
ID   ABC21702 standard; DNA; 13 BP.
XX
AC   ABC21702;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 21719 for detecting SNP TSC0004349.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 21719; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 3 T; 1 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 13;
  Best Local Similarity   84.6%;  Pred. No. 2.5e+02;
  Matches   11;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
              |||| |||||||:
Db          1 GGAGTTGGAGATY 13


RESULT 303
ABC21703/c
ID   ABC21703 standard; DNA; 13 BP.
XX
AC   ABC21703;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 21720 for detecting SNP TSC0004349.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
```

```
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1747 TCCCTATCCTA 1757
             ||||||||||| |
Db         11 TCCCTATCCTA 1


RESULT 299
ABI68036
ID   ABI68036 standard; DNA; 12 BP.
XX
AC   ABI68036;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 368009 for detecting SNP TSC0056696.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 368009; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1724 GATGGAGATTG 1734
             ||||||||||| |
Db          1 GATGGAGATTG 11


RESULT 300
ABI77791/c
ID   ABI77791 standard; DNA; 12 BP.
XX
AC   ABI77791;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 377764 for detecting SNP TSC0007286.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 377764; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 5 A; 5 C; 0 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1704 AGTTGGGTTAG 1714
             ||||||||||| |
Db         11 AGTTGGGTTAG 1


RESULT 301
ABI81002/c
ID   ABI81002 standard; DNA; 12 BP.
XX
```

KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 358888; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 4 A; 0 C; 7 G; 1 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1746 CTCCCTATCCT 1756
||||||||||
Db 12 CTCCCTATCCT 2

RESULT 297
ABI59814
ID ABI59814 standard; DNA; 12 BP.
XX
AC ABI59814;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 359787 for detecting SNP TSC0051760.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 359787; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 4 A; 0 C; 7 G; 1 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1721 GGAGATGGAGA 1731
||||||||||
Db 1 GGAGATGGAGA 11

RESULT 298
ABI65852/c
ID ABI65852 standard; DNA; 12 BP.
XX
AC ABI65852;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 365825 for detecting SNP TSC0055375.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 365825; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

```
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 5 A; 0 C; 5 G; 2 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1747 TCCCTATCCTA 1757
             ||||||||||| 
Db         12 TCCCTATCCTA 2


RESULT 294
ABI40118
ID   ABI40118 standard; DNA; 12 BP.
XX
AC   ABI40118;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 340091 for detecting SNP TSC0041342.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 340091; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 2 A; 0 C; 7 G; 3 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1708 GGGTTAGGAGT 1718
             ||||||||||| 
Db          1 GGGTTAGGAGT 11


RESULT 295
ABI53626
ID   ABI53626 standard; DNA; 12 BP.
XX
AC   ABI53626;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 353599 for detecting SNP TSC0048610.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 353599; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 0 C; 4 G; 5 T; 0 other;

  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1703 AAGTTGGGTTA 1713
             ||||||||||| 
Db          1 AAGTTGGGTTA 11


RESULT 296
ABI58915/c
ID   ABI58915 standard; DNA; 12 BP.
XX
AC   ABI58915;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 358888 for detecting SNP TSC0051363.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
```

PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 301086; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 3 A; 6 C; 0 G; 3 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1737 TCCCAACTCCT 1747
||||||||||
Db 2 TCCCAACTCCT 12

RESULT 292
ABI08693
ID ABI08693 standard; DNA; 12 BP.
XX
AC ABI08693;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 308666 for detecting SNP TSC0023148.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 308666; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 1 A; 7 C; 0 G; 4 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 12;
Best Local Similarity 100.0%; Pred. No. 2.2e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1746 CTCCCTATCCT 1756
||||||||||
Db 1 CTCCCTATCCT 11

RESULT 293
ABI33606/c
ID ABI33606 standard; DNA; 12 BP.
XX
AC ABI33606;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 333579 for detecting SNP TSC0037611.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 333579; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed

```
Qy       1681 GGTGTCTCCTC 1691
             ||||||||||
Db          1 GGTGTCTCCTC 11
```

RESULT 289
ABH74564
ID ABH74564 standard; DNA; 12 BP.
XX
AC ABH74564;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 274549 for detecting SNP TSC0003590.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 274549; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 2 A; 0 C; 5 G; 5 T; 0 other;

```
  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1704 AGTTGGGTTAG 1714
             ||||||||||
Db          2 AGTTGGGTTAG 12
```

RESULT 290
ABH98049
ID ABH98049 standard; DNA; 12 BP.
XX
AC ABH98049;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 298042 for detecting SNP TSC0017887.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 298042; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 3 A; 0 C; 6 G; 3 T; 0 other;

```
  Query Match             7.9%;  Score 11;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+02;
  Matches   11;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1698 GGTGGAAGTTG 1708
             ||||||||||
Db          2 GGTGGAAGTTG 12
```

RESULT 291
ABI01113
ID ABI01113 standard; DNA; 12 BP.
XX
AC ABI01113;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide primer SEQ ID NO 301086 for detecting SNP TSC0019345.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX

PT Antisense compounds targeted to steroid receptor RNA activator useful
PT for diagnosis, prophylaxis and treatment of diseases associated with
PT the steroid activator, such as infection, inflammation or tumor
PT formation -
XX
PS Claim 3; Column 41; 47pp; English.
XX
CC The present sequence is one of a large number of antisense
CC oligonucleotides which is directed against one of four human steroid
CC receptor RNA activator (SRA) nucleic acid sequences. Two series of
CC antisense oligonucleotides were synthesised. The first series comprised
CC 8-30 oligodeoxynucleotides with a phosphorothioate backbone. The second
CC series comprised chimeric oligonucleotides composed of a central gap
CC region, consisting of ten 2'-deoxynucleotides, which was flanked on both
CC sides by four-nucleotide wings. The wings were composed of
CC 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same
CC nucleotide sequences. The antisense compounds are useful for research,
CC diagnosis, treatment and prophylaxis to prevent or delay infection,
CC inflammation or tumour formation. Therapeutically the oligonucleotides
CC are highly safe and are effectively administered to humans.
XX
SQ Sequence 18 BP; 3 A; 4 C; 6 G; 5 T; 0 other;

Query Match 8.1%; Score 11.2; DB 1; Length 18;
Best Local Similarity 81.2%; Pred. No. 3.8e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1658 ACCAGGCTCACAGCTG 1673
||||||| |||| |
Db 16 ACCAGGCTTCCAGCAG 1

RESULT 287
ABV62361
ID ABV62361 standard; cDNA; 11 BP.
XX
AC ABV62361;
XX
DT 21-OCT-2002 (first entry)
XX
DE Human skin EST 147.
XX
KW Human; skin; dermatological; vulnerary; antipsoriatic; antiseborrhaeic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
OS Homo sapiens.
XX
PN WO200253774-A2.
XX
PD 11-JUL-2002.
XX
PF 20-DEC-2001; 2001WO-EP15179.
XX
PR 03-JAN-2001; 2001DE-1000127.
XX
PA (HENK ) HENKEL KGAA.
XX
PI Petersohn D, Conradt M, Hofmann K;
XX
DR WPI; 2002-590638/63.
XX
PT In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer -
XX
PS Disclosure; Page 30; 1345pp; German.
XX
CC The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention.
XX
SQ Sequence 11 BP; 0 A; 4 C; 3 G; 4 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1681 GGTGTCTCCTC 1691
||||||||||
Db 1 GGTGTCTCCTC 11

RESULT 288
ABV69782
ID ABV69782 standard; cDNA; 11 BP.
XX
AC ABV69782;
XX
DT 21-OCT-2002 (first entry)
XX
DE Human skin EST 7568.
XX
KW Human; skin; dermatological; vulnerary; antipsoriatic; antiseborrhaeic;
KW immunosuppressive; antiinflammatory; cytostatic; SAGE; neurodermatitis;
KW psoriasis; dermatitis; skin cancer; EST; expressed sequence tag; ss.
XX
OS Homo sapiens.
XX
PN WO200253774-A2.
XX
PD 11-JUL-2002.
XX
PF 20-DEC-2001; 2001WO-EP15179.
XX
PR 03-JAN-2001; 2001DE-1000127.
XX
PA (HENK ) HENKEL KGAA.
XX
PI Petersohn D, Conradt M, Hofmann K;
XX
DR WPI; 2002-590638/63.
XX
PT In vitro identification of skin-expressed genes, useful for determining
PT homeostasis and identifying cosmetic or pharmaceutical agents against
PT e.g. skin cancer -
XX
PS Claim 24; Page 239; 1345pp; German.
XX
CC The invention relates to in vitro identification (M1) of genes expressed
CC in the skin of humans or animals by subjecting a mixture of genetically
CC encoded factors from skin, to serial analysis of gene expression (SAGE)
CC so as to identify skin-expressed genes and quantify their expression.
CC (M1) is useful for identifying genes involved in skin homeostasis; to
CC determine skin homeostasis and to test agent (A) that maintains or
CC promotes skin homeostasis or that can be used for treating skin
CC disorders, specifically neurodermatitis; sunburn; psoriasis; scleroderma;
CC ichthyosis; atopic dermatitis; acne; seborrhea; lupus erythematosus;
CC rosacea; melanoma; basal cell carcinoma; and carcinoma or sarcoma of the
CC skin. The present sequence is that of a human expressed sequence tag
CC (EST) of the invention.
XX
SQ Sequence 11 BP; 0 A; 4 C; 3 G; 4 T; 0 other;

Query Match 7.9%; Score 11; DB 1; Length 11;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 11; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

KW transplant rejection; psoralen; photo-ultra-violet therapy; ds.
XX
OS Unidentified.
XX
PN WO200179487-A2.
XX
PD 25-OCT-2001.
XX
PF 18-APR-2001; 2001WO-DE01509.
XX
PR 18-APR-2000; 2000DE-1019252.
XX
PA (DEGI/) DEGITZ K K.
PA (BESC/) BESCH R.
XX
PI Degitz KK, Besch R;
XX
DR WPI; 2002-017614/02.
XX
PT Triple-helix forming polydeoxyribonucleotides, useful for treating
PT intracellular adhesion molecule-1 related diseases, e.g. psoriasis, are
PT directed against transcribed or promoter regions of the ICAM-1 gene -
XX
PS Claim 5; Page 4; 61pp; German.
XX
CC This invention describes novel polydeoxyribonucleotides (A), for use as
CC triple-helix forming oligonucleotides, having at least 3 sequential
CC purine and/or pyrimidine bases, capable of inhibiting transcription of
CC ICAM-1. (A) has a sequence specific for the transcribed or promoter
CC regions of the ICAM-1 (intracellular adhesion molecule) gene. The
CC products of the invention have antipsoriatic, dermatological,
CC antiasthmatic, antiinflammatory, immunosuppressive and gastrointestinal
CC activity. (A) are used for treatment or prevention of ICAM-1-associated
CC diseases, specifically psoriasis, neurodermatitis, allergic asthma,
CC Crohn's disease, autoimmune diseases and transplant rejection. Compared
CC with antisense oligonucleotides, (A) provide a longer-lasting effect
CC (they bind directly to the gene, so a compensatory increase in
CC transcription is not possible). (A) may be coupled to psoralen to provide
CC light-regulatable, sequence-specific downregulation of genes; this should
CC make photo-ultra-violet therapy more specific, with reduced side effects.
CC AAI68599-AAI68673 represent oligonucleotides used to illustrate the
CC method of the invention.
XX
SQ Sequence 16 BP; 4 A; 0 C; 11 G; 1 T; 0 other;

Query Match 8.1%; Score 11.2; DB 1; Length 16;
Best Local Similarity 81.2%; Pred. No. 3.2e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1736 CTCCCAACTCCTCCCT 1751
|| |||| || ||||||
Db 16 CCCCCACCTTCTCCCT 1

RESULT 285
ABZ65014/c
ID ABZ65014 standard; RNA; 17 BP.
XX
AC ABZ65014;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human HER2 DNAzyme substrate #471.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US16840.
XX
PR 29-MAY-2001; 2001US-294140P.
PR 06-JUN-2001; 2001US-296249P.
PR 10-SEP-2001; 2001US-318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences -
XX
PS Claim 4; Page 142; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and
CC anti-rheumatic activity. The nucleic acid molecules are useful for
CC reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC acids are also useful for treating breast, ovarian, colorectal, lung,
CC prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC sequences for the human ribozymes of the invention.
XX
SQ Sequence 17 BP; 3 A; 9 C; 1 G; 4 U; 0 other;

Query Match 8.1%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 3.5e+02;
Matches 13; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1636 GGGCTTGTAGCAGAAG 1651
|||| ||||| ||| |
Db 16 GGGCATGTAGGAGAGG 1

RESULT 286
AAA92575/c
ID AAA92575 standard; DNA; 18 BP.
XX
AC AAA92575;
XX
DT 04-JAN-2001 (first entry)
XX
DE Antisense oligonucleotide ISIS# 30285.
XX
KW Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
KW SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
OS Synthetic.
XX
PN US6107092-A.
XX
PD 22-AUG-2000.
XX
PF 29-MAR-1999; 99US-0280409.
XX
PR 29-MAR-1999; 99US-0280409.
XX
PA (ISIS-) ISIS PHARM INC.
PA (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI Cowsert LM, Bennett CF, O'Malley BW;
XX
DR WPI; 2000-586211/55.
XX

```
AAS56873
ID   AAS56873 standard; DNA; 16 BP.
XX
AC   AAS56873;
XX
DT   16-JAN-2002  (first entry)
XX
DE   Validation ribozyme DNA sequence #47.
XX
KW   Human; BRCA-1 regulator; ribozyme; BR1; RNA target recognition; probe;
KW   cytostatic; RNA cleavage; tumour suppressor; PCR primer; CHLR2; AF6; BR2;
KW   inhibitor dominant negative 4; breast basic conserved protein 1; BBC1;
KW   BR3; ID4; cancer; proliferative disorder; tumour proliferation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200170982-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US09559.
XX
PR   23-MAR-2000; 2000US-0536058.
XX
PA   (IMMU-) IMMUSOL INC.
PA   (BEGE/) BEGER C.
XX
PI   Beger C,  Barber J,  Wong-staal F;
XX
DR   WPI; 2001-611503/70.
XX
PT   Novel polypeptides that are the regulators of BRCA-1, useful for
PT   treating cancer and diagnosing the presence of neoplastic cells in
PT   biological sample  -
XX
PS   Disclosure; Fig 8; 97pp; English.
XX
CC   Sequences AAS56729-AAS56968 represent DNA encoding BRCA-1 regulators,
CC   ribozyme target recognition RNA sequences, DNA fragments encoding the RNA
CC   and primers used in the methods of the invention. Hybridisation of
CC   ribozymes to their targets results in cleavage of the RNA target. The
CC   ribozymes can be used to cleave regulators of the tumour suppressor
CC   BRCA-1, resulting in upregulation or downregulation of BRCA-1 in a cell.
CC   The mRNA targets include those encoding the BRCA-1 regulator BR1,
CC   inhibitor dominant negative 4 (ID4), breast basic conserved protein 1
CC   (BBC1), CHLR2, AF6, BR2 and BR3. Regulation of BRCA-1 is useful for
CC   treating and diagnosing cancer and other proliferative disorders. The
CC   severity of an incidence of cancer can be lessened by regulating tumour
CC   proliferation through modulation of BRCA-1 expression. The sequences of
CC   the invention are useful in the development of anti-cancer drugs.
XX
SQ   Sequence 16 BP; 3 A; 5 C; 3 G; 5 T; 0 other;

  Query Match             8.1%;  Score 11.2;  DB 1;  Length 16;
  Best Local Similarity   81.2%;  Pred. No. 3.2e+02;
  Matches   13;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1679 CTGGTGTCTCCTCCAG 1694
              ||| ||||| || |||
Db          1 CTGCTGTCTACTACAG 16


RESULT 283
ABZ34019/c
ID   ABZ34019 standard; DNA; 16 BP.
XX
AC   ABZ34019;
XX
DT   31-JAN-2003  (first entry)
XX
DE   HIV-1 reverse transcriptase mutation detection probe SEQ ID NO:261.
XX
KW   Human immunodeficiency virus; HIV; reverse transcriptase; RT; enzyme;
KW   detection; mutation; anti-HIV drug resistance; polymorphism; resistance;
KW   probe; ss.
XX
OS   Human immunodeficiency virus type 1.
OS   Synthetic.
XX
PN   WO200255741-A2.
XX
PD   18-JUL-2002.
XX
PF   09-JAN-2002; 2002WO-EP00153.
XX
PR   11-JAN-2001; 2001EP-0870005.
PR   20-APR-2001; 2001EP-0870085.
PR   24-APR-2001; 2001US-286102P.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   De Smet K,  Stuyver L;
XX
DR   WPI; 2002-590680/63.
XX
PT   Detecting mutations associated with anti-HIV drug resistance comprises
PT   detecting at least one of the mutations in the HIV reverse
PT   transcriptase gene by using probes optimized to function together in a
PT   reverse-hybridization assay  -
XX
PS   Claim 2; Page 19; 117pp; English.
XX
CC   The present invention describes a method for detecting mutations
CC   associated with anti-HIV drug resistance in a patient by detecting at
CC   least one of the mutations K103N/R, V106A/I/L, Y181C/I, M184V/I, Y188L,
CC   G190A/S/R, T215Y/F/D/S/A and/or Q151M/L in the reverse transcriptase (RT)
CC   of HIV strains in a biological sample using a specific set of probes
CC   optimised to function together in a reverse-hybridisation assay. The
CC   method and the nucleic acid sequences used in the method are useful for
CC   determining viral mutations and/or polymorphisms in the HIV RT gene
CC   associated with resistance. The probes are useful for the genetic
CC   detection, preferably in vitro detection of the mutations K103N/R,
CC   V106A/I/L, Y181C/I, Q151M/L, M184V/I, Y188L, G190A/S/R and/or
CC   T215Y/F/D/S/A in the RT of HIV strains in a biological sample, where
CC   the mutation is associated with anti-HIV drug resistance. The method
CC   provides a rapid, reliable and precise assay or determination and
CC   monitoring of antiviral drug resistance or mutations associated with
CC   drug resistance of viruses containing RT genes. ABZ33759 to ABZ34642
CC   represent HIV RT sequences and probes which are used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 16 BP; 5 A; 4 C; 4 G; 3 T; 0 other;

  Query Match             8.1%;  Score 11.2;  DB 1;  Length 16;
  Best Local Similarity   81.2%;  Pred. No. 3.2e+02;
  Matches   13;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1690 TCCAGCGTGGTGGAAG 1705
              |||| |·| |||||||
Db         16 TCCATCCTTGTGGAAG 1


RESULT 284
AAI68609/c
ID   AAI68609 standard; DNA; 16 BP.
XX
AC   AAI68609;
XX
DT   14-JAN-2002  (first entry)
XX
DE   ICAM-1 triple helix associated oligonucleotide SEQ ID 11.
XX
KW   ICAM-1; triple helix; transcription inhibition; antipsoriatic;
KW   intracellular adhesion molecule; dermatological; antiasthmatic;
KW   antiinflammatory; immunosuppressive; gastrointestinal; psoriasis;
KW   neurodermatitis; allergic asthma; Crohn's disease; autoimmune disease;
```

```
DT   26-MAY-1994  (first entry)
XX
DE   Cytomegalovirus target sequence 36.
XX
KW   RNA; enzyme; enzymatic RNA molecule; ERM; cleave; RNA; mRNA; HnRNA;
KW   picornavirus; HIV; immunodeficiency virus; hepatitis B virus; HBV;
KW   papilloma virus; HPV; Epstein-Barr virus; EBV; TCLV;
KW   T-cell leukaemia virus; hepatitis C virus; HCV; cytomegalovirus;
KW   influenza virus; HSV; herpes simplex virus; vector; immune response;
KW   antibody; ribozyme; viral RNA; treatment; ss.
XX
OS   Synthetic.
XX
PN   WO9323569-A1.
XX
PD   25-NOV-1993.
XX
PF   29-APR-1993;   93WO-US04020.
XX
PR   11-MAY-1992;   92US-0882689.
PR   14-MAY-1992;   92US-0882712.
PR   14-MAY-1992;   92US-0882713.
PR   14-MAY-1992;   92US-0882714.
PR   14-MAY-1992;   92US-0882823.
PR   14-MAY-1992;   92US-0882824.
PR   14-MAY-1992;   92US-0882886.
PR   14-MAY-1992;   92US-0882888.
PR   14-MAY-1992;   92US-0882889.
PR   14-MAY-1992;   92US-0882921.
PR   14-MAY-1992;   92US-0882922.
PR   14-MAY-1992;   92US-0883823.
PR   14-MAY-1992;   92US-0883849.
PR   14-MAY-1992;   92US-0884073.
PR   14-MAY-1992;   92US-0884074.
PR   14-MAY-1992;   92US-0884333.
PR   14-MAY-1992;   92US-0884422.
PR   14-MAY-1992;   92US-0884431.
PR   14-MAY-1992;   92US-0884436.
PR   14-MAY-1992;   92US-0884521.
PR   31-JUL-1992;   92US-0923738.
PR   26-AUG-1992;   92US-0935854.
PR   26-AUG-1992;   92US-0936086.
PR   18-SEP-1992;   92US-0948359.
PR   15-OCT-1992;   92US-0963322.
PR   07-DEC-1992;   92US-0987129.
PR   07-DEC-1992;   92US-0987130.
PR   07-DEC-1992;   92US-0987133.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Draper KG,  Dudycz LW,  Mcswiggen JA,  Macejak DG,  Holecek JJ;
PI   Mamone JA;
XX
DR   WPI; 1993-386599/48.
XX
PT   Enzymatic RNA molecules - used to inhibit viral replication,
PT   infection and gene expression
XX
PS   Claim 5; Fig 13; 287pp; English.
XX
CC   The sequences (AAQ52824-Q52890) are pref. Cytomegalovirus target
CC   sequences for enzymatic RNA molecules. The RNA molecules are
CC   complementary to a substrate binding region in the specified gene
CC   target. They also have enzymatic activity, in that they specifically
CC   cleave RNA in the target. The ERMs interfere with viral replication and
CC   therefore have anti-viral properties. They can be used to attenuate
CC   viruses to be used in vaccines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
CC   (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 16 BP; 2 A; 6 C; 5 G; 3 U; 0 other;
```

```
  Query Match          8.1%;  Score 11.2;  DB 1;  Length 16;
  Best Local Similarity   62.5%;  Pred. No. 3.2e+02;
  Matches   10;  Conservative    3;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1679 CTGGTGTCTCCTCCAG 1694
              |:||:|:  || ||||
Db          1 CUGGUGUGACCCCCAG 16


RESULT 281
AAA74719/c
ID   AAA74719 standard; DNA; 16 BP.
XX
AC   AAA74719;
XX
DT   12-JAN-2001  (first entry)
XX
DE   Mycobacterium BCG transposition mutant cloned insertion site MYC7.
XX
KW   Mycobacterium bovis; Mycobacterium tuberculosis; SacB; levane saccharase;
KW   BCG transposition mutant; insertion site; transposon mutagenesis; ds.
XX
OS   Mycobacterium sp.
XX
PN   US6096549-A.
XX
PD   01-AUG-2000.
XX
PF   11-JUN-1997;   97US-0872917.
XX
PR   11-JUN-1996;   96US-0661658.
XX
PA   (INSP ) INST PASTEUR.
XX
PI   Gicquel B,  Guilhot C,  Jackson M,  Pelicic V,  Reyrat J;
XX
DR   WPI; 2000-542306/49.
XX
PT   Transforming Mycobaterium strains for positive selection of allelic
PT   exchange mutants, involves transfecting cells with vector comprising
PT   marker gene and transposon and selecting in medium containing sucrose
PT   -
XX
PS   Disclosure; Fig 15; 29pp; English.
XX
CC   The present sequence is one of a number of cloned insertion sites
CC   for Mycobacterium tuberculosis and Mycobacterium bovis BCG transposition
CC   mutants. BCG transposition mutants were made as part of a process for
CC   replacing a nucleotide sequence in the genome of a slow growing
CC   Mycobacterium strain. The process comprises transfecting Mycobacterium
CC   with a vector containing SacB gene coding for levane saccharase enzyme
CC   and selecting clones of transformed Mycobacteria by propagating the
CC   clones in a culture medium supplemented with sucrose. The method is
CC   useful for inserting a transposon in the genome of a Mycobacterium
CC   strain. Protective antigens, e.g. for use in BCG vaccine strains, may
CC   be cloned into the Mycobacterium genome. The process is also useful for
CC   random inactivation of genes coding for a protein involved in the
CC   virulence of a pathogenic mycobacterium strain. The method facilitates
CC   an increase of the proportion of allelic exchange mutants, making the
CC   screening of transformants easier.
XX
SQ   Sequence 16 BP; 4 A; 4 C; 4 G; 4 T; 0 other;

  Query Match          8.1%;  Score 11.2;  DB 1;  Length 16;
  Best Local Similarity   81.2%;  Pred. No. 3.2e+02;
  Matches   13;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1754 CCTAAAGGCCCACTGG 1769
              ||||| |||| | |||
Db         16 CCTAATGGCCTAATGG 1


RESULT 282
```

```
PT   react with restriction fragments
XX
PS   Example; Page 13; 46pp; French.
XX
CC   The sequence is that of a polynucleotide probe which may be used in
CC   the detection of new hypervariable regions (HVR) in a DNA sequence.
CC   HVR represent a fingerprint useful in e.g. forensic science,
CC   paternity testing, animal breeding, etc. The probe may be used as
CC   part of a method for the efficient detection in humans or other
CC   animals, without the use of mini-satellites or primary enrichment.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 5 A; 4 C; 6 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 16;
  Best Local Similarity   92.3%;  Pred. No. 2.9e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCA 1667
              || ||||||||||
Db          1 AGAACCAGGCTCA 13


RESULT 278
AAQ29793/c
ID   AAQ29793 standard; DNA; 16 BP.
XX
AC   AAQ29793;
XX
DT   25-MAR-2003  (updated)
DT   19-MAR-1993  (first entry)
XX
DE   A allele probe VP50.
XX
KW   G-gamma globulin; GGG; polymorphism; HindIII; A allele; B; C;
KW   genotype; paternity; forensic; ss.
XX
OS   Synthetic.
XX
PN   EP512342-A2.
XX
PD   11-NOV-1992.
XX
PF   25-APR-1992;   92EP-0107084.
XX
PR   07-MAY-1991;   91US-0696793.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Nasarabadi SL,  Saiki RK;
XX
DR   WPI; 1992-374679/46.
XX
PT   Determn. of an individuals genotype at the gamma-globin locus -
PT   using sequence-specific oligo-nucleotide probes corresp. to 3
PT   alleles
XX
PS   Disclosure; Page 14; 29pp; English.
XX
CC   The sequences given in AAQ29787-816 are probes which were used within
CC   the method of the invention for detecting the presence of a varient
CC   sequence in the G-gamma globulin (GGG) locus.  The A, B and C
CC   alleles can be distinguished from one another by the polymorphic
CC   sequence corresponding to the HindIII site of the A allele.  The
CC   sequences of the three alleles are given in AAQ29842-44.  The methods
CC   for determining an individuals genotype at the GGG locus with
CC   respect to a set of alleles improves the discriminatory power of GGG
CC   typing methodology compared to previous methods using two alleles.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 5 A; 8 C; 1 G; 2 T; 0 other;

  Query Match             8.1%;  Score 11.2;  DB 1;  Length 16;
  Best Local Similarity   81.2%;  Pred. No. 3.2e+02;
  Matches   13;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1670 GCTGGAACCCTGGTGT 1685
              | ||||| | ||||||
Db         16 GGTGGAAGCTTGGTGT 1


RESULT 279
AAQ29795/c
ID   AAQ29795 standard; DNA; 16 BP.
XX
AC   AAQ29795;
XX
DT   25-MAR-2003  (updated)
DT   19-MAR-1993  (first entry)
XX
DE   A allele probe VP52.
XX
KW   G-gamma globulin; GGG; polymorphism; HindIII; A allele; B; C;
KW   genotype; paternity; forensic; ss.
XX
OS   Synthetic.
XX
PN   EP512342-A2.
XX
PD   11-NOV-1992.
XX
PF   25-APR-1992;   92EP-0107084.
XX
PR   07-MAY-1991;   91US-0696793.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Nasarabadi SL,  Saiki RK;
XX
DR   WPI; 1992-374679/46.
XX
PT   Determn. of an individuals genotype at the gamma-globin locus -
PT   using sequence-specific oligo-nucleotide probes corresp. to 3
PT   alleles
XX
PS   Disclosure; Page 15; 29pp; English.
XX
CC   The sequences given in AAQ29787-816 are probes which were used within
CC   the method of the invention for detecting the presence of a varient
CC   sequence in the G-gamma globulin (GGG) locus.  The A, B and C
CC   alleles can be distinguished from one another by the polymorphic
CC   sequence corresponding to the HindIII site of the A allele.  The
CC   sequences of the three alleles are given in AAQ29842-44.  The methods
CC   for determining an individuals genotype at the GGG locus with
CC   respect to a set of alleles improves the discriminatory power of GGG
CC   typing methodology compared to previous methods using two alleles.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 4 A; 8 C; 1 G; 3 T; 0 other;

  Query Match             8.1%;  Score 11.2;  DB 1;  Length 16;
  Best Local Similarity   81.2%;  Pred. No. 3.2e+02;
  Matches   13;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1669 AGCTGGAACCCTGGTG 1684
              || ||||| | |||||
Db         16 AGGTGGAAGCTTGGTG 1


RESULT 280
AAQ52859
ID   AAQ52859 standard; RNA; 16 BP.
XX
AC   AAQ52859;
XX
DT   25-MAR-2003  (updated)
```

KW gynaecological; cytostatic; hormonal; target validation; gene therapy;
KW drug screening; lead compound; allele-specific oligonucleotide; ASO;
KW primer; ss.
XX
OS Homo sapiens.
XX
PN WO200294850-A2.
XX
PD 28-NOV-2002.
XX
PF 01-NOV-2001; 2001WO-US50630.
XX
PR 18-MAY-2001; 2001US-0016353.
XX
PA (GENA-) GENAISSANCE PHARM INC.
XX
PI Duda A, Kliem SE, Nandabalan K, Sausker EA;
XX
DR WPI; 2003-148454/14.
XX
PT New gonadotropin-releasing hormone 2 (GNRH2) polypeptide encoded by
PT genetic variants having polymorphisms in the GNRH2 gene, for studying
PT the function of, and treating disorders, such as, reproductive
PT disorders -
XX
PS Claim 14; Column 13; 33pp; English.
XX
CC The invention relates to gonadotropin-releasing hormone 2 (GNRH2) and
CC its nucleic acid sequence. Polymorphic variants of the GNRH2 gene are
CC useful in studying the expression and function of GNRH2, and in
CC expressing GNRH2 proteins for use in screening candidate drugs for
CC treating diseases associated with GNRH2 activity, such as reproductive
CC disorders. Polynucleotides comprising a polymorphic gene variant or
CC fragment may be used for therapeutic purposes, where a patient could
CC benefit from expression or increased expression of a particular GNRH2
CC protein isoform, or an expression vector encoding the isoform may be
CC administered to the patient. Haplotype information is useful in
CC improving the efficiency and output of several steps in a drug discovery
CC and development process, including target validation, identifying lead
CC compounds, and early phase clinical trials. GNRH2 gene is used in gene
CC therapy. The present sequence is an allele-specific oligonucleotide
CC (ASO) primer used for detecting human GNRH2 gene polymorphisms.
XX
SQ Sequence 15 BP; 2 A; 9 C; 0 G; 3 T; 1 other;

Query Match 8.2%; Score 11.4; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 2.6e+02;
Matches 12; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1744 TCCTCCCTATCCTAA 1758
||||||||| || :|
Db 1 TCCTCCCTACCCCRA 15

RESULT 276
AAQ29804/c
ID AAQ29804 standard; DNA; 16 BP.
XX
AC AAQ29804;
XX
DT 25-MAR-2003 (updated)
DT 19-MAR-1993 (first entry)
XX
DE B allele probe SN26.
XX
KW G-gamma globulin; GGG; polymorphism; HindIII; A allele; B; C;
KW genotype; paternity; forensic; ss.
XX
OS Synthetic.
XX
PN EP512342-A2.
XX
PD 11-NOV-1992.
XX
PF 25-APR-1992; 92EP-0107084.
XX
PR 07-MAY-1991; 91US-0696793.
XX
PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI Nasarabadi SL, Saiki RK;
XX
DR WPI; 1992-374679/46.
XX
PT Determn. of an individuals genotype at the gamma-globin locus -
PT using sequence-specific oligo-nucleotide probes corresp. to 3
PT alleles
XX
PS Disclosure; Page 17; 29pp; English.
XX
CC The sequences given in AAQ29787-816 are probes which were used within
CC the method of the invention for detecting the presence of a varient
CC sequence in the G-gamma globulin (GGG) locus. The A, B and C
CC alleles can be distinguished from one another by the polymorphic
CC sequence corresponding to the HindIII site of the A allele. The
CC sequences of the three alleles are given in AAQ29842-44. The methods
CC for determining an individuals genotype at the GGG locus with
CC respect to a set of alleles improves the discriminatory power of GGG
CC typing methodology compared to previous methods using two alleles.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 16 BP; 4 A; 9 C; 1 G; 2 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 16;
Best Local Similarity 92.3%; Pred. No. 2.9e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1699 GTGGAAGTTGGGT 1711
||||||| |||||
Db 16 GTGGAAGCTGGGT 4

RESULT 277
AAQ40622
ID AAQ40622 standard; DNA; 16 BP.
XX
AC AAQ40622;
XX
DT 25-MAR-2003 (updated)
DT 10-AUG-1993 (first entry)
XX
DE Hypervariable region detection probe 16C17.
XX
KW HVR; human; animal; forensic science; paternity testing; diagnosis;
KW animal breeding; hereditary diseases; tumours; allele; loss;
KW chromosomal regions; tumour region identification; ss.
XX
OS Synthetic.
XX
PN FR2680520-A1.
XX
PD 26-FEB-1993.
XX
PF 22-AUG-1991; 91FR-0010516.
XX
PR 22-AUG-1991; 91FR-0010516.
XX
PA (ETFR ) ETAT FRANCAIS.
XX
PI Vergnaud G;
XX
DR WPI; 1993-136548/17.
XX
PT Detecting the hypervariable regions of DNA for diagnosing
PT hereditary illnesses and tumours - by hybridising labelled
PT polynucleotides and analysing genomic DNA of individuals which

```
XX
OS   Homo sapiens.
XX
PN   WO200177124-A2.
XX
PD   18-OCT-2001.
XX
PF   03-APR-2001; 2001WO-US10670.
XX
PR   05-APR-2000; 2000US-194362P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bentivegna SC,  Choi JY,  Kliem SE,  Koshy B;
XX
DR   WPI; 2002-041281/05.
XX
PT   New haplotypes of the human apolipoprotein A-IV gene, useful to
PT   diagnose and treat disorders associated with its abnormal expression or
PT   function such as coronary artery disease  -
XX
PS   Claim 16; Page 15; 71pp; English.
XX
CC   The invention relates to haplotyping the human apolipoprotein A-IV
CC   (APOA4) gene of an individual, comprising determining if the individual
CC   has one of the APOA4 haplotypes or haplotype pairs fully defined in the
CC   specification. Also disclosed are genotyping oligonucleotides (or
CC   allele specific oligonucleotides, ASO) as well as methods for correlating
CC   a particular haplotype pair with a trait e.g. obesity, in a population.
CC   The APOA4 gene is located on chromosome 11q23-qter. The methods of the
CC   invention are useful to diagnose and develop treatment for disorders
CC   associated with abnormal APOA4 expression or function, for example
CC   coronary heart disease and atherosclerosis. The APOA4 isogenes and
CC   screened compounds are useful for the treatment of disorders associated
CC   with abnormal APOA4 expression or function such as coronary artery
CC   disease. The present sequence is an APOA4 allele specific
CC   oligonucleotide, ASO, probe used to detect an APOA4 polymorphism.
XX
SQ   Sequence 15 BP; 3 A; 1 C; 9 G; 1 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1735 GCTCCCAACTCCTCC 1749
              || | ||:|||||||
Db         15 GCCCTCARCTCCTCC 1


RESULT 274
ABK29978/c
ID   ABK29978 standard; DNA; 15 BP.
XX
AC   ABK29978;
XX
DT   23-APR-2002  (first entry)
XX
DE   Hepatitis B virus (HBV) domain 10 wild type.
XX
KW   Cyclin D1 promoter; CD40L promoter; hepatitis B virus promoter;
KW   HBV promoter; vancomycin-resistant enterococci promoter; VRE promoter;
KW   vanH promoter; androgen receptor promoter; AR promoter;
KW   human epidermal growth factor receptor 2 promoter; her2 promoter;
KW   beta lactamase promoter; Bla promoter; transgene; cancer; breast cancer;
KW   colon cancer; immunological disorder; prostate cancer; cytostatic;
KW   autoimmune disease; HBV pre-S promoter; HBV-X promoter;
KW   Enterococcus infection; immunosuppressive; antibacterial; antiviral;
KW   gene expression modulator; multiple sclerosis; MS;
KW   chronic hepatic insufficiency; cirrhosis; hepatocellular carcinoma;
KW   systematic lupus erythematosus; SLE; graft-vs-host disease; GVHD;
KW   familial adenomatous polyposis; rheumatoid arthritis; PCR; primer;
KW   transgenic; ds.
XX
OS   Hepatitis B virus.
XX
PN   WO200194600-A2.
XX
PD   13-DEC-2001.
XX
PF   06-JUN-2001; 2001WO-US18343.
XX
PR   06-JUN-2000; 2000US-209549P.
XX
PA   (GENE-) GENELABS TECHNOLOGIES INC.
XX
PI   Kim JP,  Starr DB,  Tam AW,  Laurance ME,  Michelotti EF,  Velligan MD;
PI   Latour DR,  Thomas RL,  Kongpachith A,  Sheppard LT,  Lim MY;
PI   Bruice TW;
XX
DR   WPI; 2002-130595/17.
XX
PT   New nucleic acid regulatory sequences, which are able to regulate
PT   expression of a gene operably linked to a promoter, useful for
PT   regulating the expression of transgenes and for treating e.g., cancer
PT   and immunological diseases  -
XX
PS   Example 3; Page 43; 95pp; English.
XX
CC   The invention describes an isolated nucleic acid regulatory sequence for
CC   a cyclin D1 promoter, a CD40L promoter, vancomycin-resistant enterococci
CC   (VRE) promoter, an HBV promoter, androgen receptor (AR) promoter, Human
CC   epidermal growth factor receptor 2 (HER2) promoter, or a beta lactamase
CC   (Bla) promoter. Transcription regulatory sequences may be used to
CC   regulate expression of the endogenous, autologous or heterologous genes
CC   operably linked to the promoter, and may be incorporated into
CC   heterologous nucleic acid constructs for use in regulated expression of
CC   transgenes. Regulated expression of cyclin D1 can be used in cancer
CC   therapies, such as breast, colon or pancreatic cancers and familial
CC   adenomatous polyposis. Regulation of the activity of CD40L gene promoter
CC   may be used in the treatment of immunological disorders, such as
CC   autoimmune diseases e.g. multiple sclerosis (MS), systematic lupus
CC   erythematosus (SLE), graft-vs-host disease (GVHD) and rheumatoid
CC   arthritis. Regulated expression of genes under the control of the HBV
CC   (hepatitis B)-specific core, pre-S and X promoters can be used in the
CC   therapy of HBV disease, chronic hepatic insufficiency, cirrhosis,
CC   hepatocellular carcinoma, and in the regulated expression of liver
CC   cell-specific genes. Regulated expression of the vanH gene promoter can
CC   be used in treatment of Enterococcus infection, while regulated
CC   expression of the androgen receptor gene can be used in the treatment of
CC   prostate cancer. This represents the wild type sequence of a promoter
CC   region used in the invention to create mutant promoter fragments to
CC   determine the regulatory regions involved in gene expression, described
CC   in the method of the invention.
XX
SQ   Sequence 15 BP; 3 A; 0 C; 10 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTC 1748
              | ||||||||||||
Db         13 CCCCCAACTCCTC 1


RESULT 275
AAD53520
ID   AAD53520 standard; DNA; 15 BP.
XX
AC   AAD53520;
XX
DT   28-MAY-2003  (first entry)
XX
DE   Human GNRH2 gene polymorphism detecting ASO primer #12.
XX
KW   Human; gonadotropin-releasing hormone 2; GNRH2; reproductive disorder;
```

```
SQ   Sequence 15 BP; 1 A; 5 C; 7 G; 1 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1660 CAGGCTCACAGCTGG 1674
              |:||||| |||| ||
Db         15 CRGGCTCCCAGCCGG 1


RESULT 271
ABL01115/c
ID   ABL01115 standard; DNA; 15 BP.
XX
AC   ABL01115;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human AKR1B1 gene polymorphism detection ASO probe SEQ ID NO:12.
XX
KW   Human; aldo-keto reductase family 1 member B1; aldose reductase; ss;
KW   AKR1B1; chromosome 7q35; detection; polymorphism; ASO; probe; primer;
KW   allele-specific oligonucleotide; antidiabetic; gene therapy; diabetes.
XX
OS   Homo sapiens.
XX
PN   WO200179223-A2.
XX
PD   25-OCT-2001.
XX
PF   12-APR-2001; 2001WO-US11944.
XX
PR   12-APR-2000; 2000US-196315P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Choi JY,  Nandabalan K,  Rounds E,  Sanchis A;
XX
DR   WPI; 2002-075056/10.
XX
PT   Novel polymorphic variants of aldo-keto reductase family 1, member b1
PT   gene useful in studying expression and function of the protein, useful
PT   for screening drugs to treat diseases e.g. diabetes  -
XX
PS   Claim 16; Page 14; 103pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I)
CC   comprising a sequence which is a polymorphic variant (PV) of a
CC   reference sequence for aldo-keto reductase family 1, member B1 (AKR1B1)
CC   gene or its fragment, having the 22214 base pair sequence given in
CC   ABL01105. AKR1B1 has antidiabetic activity and can be used in gene
CC   therapy. AKR1B1 can be used in the treatment of diabetes. The human
CC   AKR1B1 gene is located on chromosome 7q35. ABL01107 to ABL01129
CC   represent allele-specific oligonucleotide (ASO) probes used in the
CC   detection of polymorphisms in the human AKR1B1 gene; ABL01130 to
CC   ABL01175 represent ASO primers used in the detection of polymorphisms
CC   in the human AKR1B1 gene; and ABL01176 to ABL01221 represent preferred
CC   primers used in the detection of polymorphisms in the human AKR1B1 gene.
XX
SQ   Sequence 15 BP; 3 A; 3 C; 5 G; 3 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1662 GGCTCACAGCTGGAA 1676
              |||||||: ||| ||
Db         15 GGCTCACRCCTGTAA 1


RESULT 272
AAD25425
ID   AAD25425 standard; DNA; 15 BP.
XX
AC   AAD25425;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human GNRH2 gene polymorphism detecting ASO primer #12.
XX
KW   Human; gonadotropin-releasing hormone 2; GNRH2 gene; haplotyping;
KW   genotyping; gene therapy; reproductive disorder; polymorphism;
KW   allele specific oligonucleotide; ASO; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200187910-A2.
XX
PD   22-NOV-2001.
XX
PF   18-MAY-2001; 2001WO-US16353.
XX
PR   18-MAY-2000; 2000US-205187P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Duda A,  Kliem SE,  Nandabalan K,  Sausker EA;
XX
DR   WPI; 2002-055683/07.
XX
PT   New genetic variants of gonadotropin-releasing hormone 2 isogene,
PT   useful in studying expression and function of protein and for screening
PT   drugs to treat diseases e.g. reproduction disorders  -
XX
PS   Claim 16; Page 13; 64pp; English.
XX
CC   The invention relates to genetic variants of human gonadotropin-
CC   releasing hormone 2 (GNRH2) gene. The invention also relates to
CC   compositions and methods for haplotyping and/or genotyping the GNRH2
CC   gene in an individual. Polynucleotides of the invention are useful
CC   for studying the expression and function of GNRH2 and in expressing
CC   GNRH2 proteins for use in screening candidate drugs to treat diseases
CC   related to GNRH2 activity. They are also used in gene therapy. The
CC   methods of the invention are useful in determining whether an
CC   individual has a haplotype or haplotype pairs. The haplotyping method
CC   is useful for improving the efficiency and reliability of several
CC   steps in the discovery and development of drugs for treating diseases
CC   associated with GNRH2 activity, e.g., reproductive disorders. The
CC   present sequence is an allele specific oligonucleotide (ASO) primer
CC   used for detecting human GNRH2 gene polymorphisms.
XX
SQ   Sequence 15 BP; 2 A; 9 C; 0 G; 3 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1744 TCCTCCCTATCCTAA 1758
              ||||||||| || :|
Db          1 TCCTCCCTACCCCRA 15


RESULT 273
AAS16721/c
ID   AAS16721 standard; DNA; 15 BP.
XX
AC   AAS16721;
XX
DT   14-FEB-2002  (first entry)
XX
DE   Human APOA4 allele specific oligonucleotide, ASO, probe #4.
XX
KW   Human; ss; APOA4; apolipoprotein A-IV; antiatherosclerotic; cardiant;
KW   haplotype; chromosome 11q23-qter; coronary heart disease; obesity;
KW   atherosclerosis; probe.
```

```
XX
PT   Novel isolated human period Drosophila homolog 1 polynucleotide, useful
PT   for therapeutic purposes, for studying the expression and function of
PT   the polynucleotide, and for expressing the homolog -
XX
PS   Claim 17; Page 14; 162pp; English.
XX
CC   The present invention describes an isolated human period (Drosophila)
CC   homologue 1, (PER1) polynucleotide (I) comprising a sequence which is a
CC   polymorphic variant for a reference sequence (ABL52077) for the PER1 gene
CC   or its fragment, or a polymorphic variant of a reference sequence
CC   (ABL52078) for a PER1 cDNA or its fragment. The present invention also
CC   describes methods for genotyping and haplotyping the PER1 gene of an
CC   individual. (I) is useful in studying the expression and function of
CC   PER1, and in expressing PER1 protein for use in screening for candidate
CC   drugs to treat diseases related to PER1 activity. (I) is useful for
CC   therapeutic purposes. A recombinant non-human organism transformed or
CC   transfected with (I) can be used for studying expression of the PER1
CC   isogenes in vivo, for in vivo screening and testing of drugs targeted
CC   against PER1 protein, and for testing the efficacy of therapeutic agents
CC   and compounds for disorders associated with circadian rhythm regulation.
CC   The present sequence represents an allele specific oligonucleotide probe
CC   for human PER1, which is used in the exemplification of the present
CC   invention.
XX
SQ   Sequence 15 BP; 2 A; 3 C; 9 G; 0 U; 1 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1734 GGCTCCCAACTCCTC 1748
              ||||||: |||| |
Db         15 GGCTCCCRGCTCCCC 1


RESULT 269
ABK12736/c
ID   ABK12736 standard; DNA; 15 BP.
XX
AC   ABK12736;
XX
DT   18-JUN-2002  (first entry)
XX
DE   ASO probe #1, used to detect human IFNG gene polymorphisms.
XX
KW   Human; interferon-gamma; IFNG; polymorphic variant; isogene; ss;
KW   type I diabetes; multiple sclerosis; asthma; immune-related disorder;
KW   haplotyping; single nucleotide polymorphism; SNP; probe; ASO;
KW   allele-specific oligonucleotide.
XX
OS   Homo sapiens.
XX
PN   WO200216631-A1.
XX
PD   28-FEB-2002.
XX
PF   27-AUG-2001; 2001WO-US26678.
XX
PR   25-AUG-2000; 2000US-227842P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Denton RR,  Finkel K,  Nandabalan K;
XX
DR   WPI; 2002-280945/32.
XX
PT   Novel isolated human interferon-gamma polynucleotide, useful for
PT   therapeutic purposes, for studying the expression and function of the
PT   polynucleotide, and for expressing the interferon-gamma protein -
XX
PS   Claim 16; Page 13; 58pp; English.
XX
CC   The present invention relates to a new human interferon-gamma (IFNG)
CC   polynucleotide comprising a sequence which is a polymorphic variant for
CC   a reference sequence for the IFNG gene or its fragment. The invention is
CC   useful in studying the expression and function of IFNG and in expressing
CC   IFNG protein for use in screening for candidate drugs to treat diseases
CC   related to IFNG activity. The polynucleotide of the invention is useful
CC   for therapeutic purposes. The invention is also useful for studying
CC   expression of the IFNG isogenes in vivo, for in vivo screening and
CC   testing of drugs targeted against IFNG protein, and for testing the
CC   efficacy of therapeutic agents and compounds for type I diabetes,
CC   multiple sclerosis, asthma and immune-related disorders, in a biological
CC   system. The present nucleic acid sequence represents ASO (allele-specific
CC   oligonucleotide) probe #1 that was used in the methods of the invention
CC   to detect polymorphisms in the human IFNG gene.
XX
SQ   Sequence 15 BP; 0 A; 4 C; 3 G; 7 T; 1 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1648 GAAGGCAAGCACCAG 1662
              ||| |||:||| |||
Db         15 GAAAGCARGCAACAG 1


RESULT 270
AAL45302/c
ID   AAL45302 standard; DNA; 15 BP.
XX
AC   AAL45302;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human KCNB1 gene allele-specific primer SEQ ID NO: 16.
XX
KW   Human; KCNB1; single nucleotide polymorphism; SNP; gene therapy;
KW   potassium voltage-gated channel; Shab-related subfamily, member 1;
KW   isogene; arrhythmia; seizures; allele-specific oligonucleotide; PCR;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200204675-A1.
XX
PD   17-JAN-2002.
XX
PF   05-JUL-2001; 2001WO-US21307.
XX
PR   05-JUL-2000; 2000US-215885P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Choi JY,  Koshy B;
XX
DR   WPI; 2002-188469/24.
XX
PT   Isolated polymorphic variants of potassium voltage-gated channel,
PT   Shab-related subfamily, member 1 (KCNB1) gene useful for expressing
PT   KCNB1 protein isoform to screen drugs to treat KCNB1 activity-related
PT   disease -
XX
PS   Claim 16; Page 13; 180pp; English.
XX
CC   The present invention provides the protein, gene and cDNA sequences of
CC   the human potassium voltage-gated channel, Shab-related subfamily,
CC   member 1 (KCNB1) isogene and polymorphisms identified within these
CC   sequences. The sequences can be used to screen drugs, which involves
CC   contacting the polypeptide with a candidate agent, and to assay for
CC   binding activity as a target for drugs to treat arrhythmia and seizures.
CC   The present sequence is an allele-specific oligonucleotide primer for the
CC   gene of the invention.
XX
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```
XX
PF   03-DEC-2001; 2001WO-US46946.
XX
PR   01-DEC-2000; 2000US-250606P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bieglecki KM,  Kazemi A,  Shah N;
XX
DR   WPI; 2002-519581/55.
XX
PT   Novel genetic variants of Endothelial Differentiation, Sphingolipid G
PT   Protein-Coupled Receptor 1 isogenes, useful for improving efficiency
PT   and reliability in drug development for treating vascular developmental
PT   disorders -
XX
PS   Claim 14; Page 13; 68pp; English.
XX
CC   The invention relates to an isolated polynucleotide (I) encoding
CC   endothelial differentiation, sphingolipid G protein-coupled receptor 1
CC   (EDG1) (II). Also described are methods for haplotyping or genotyping
CC   EDG1 gene of an individual by identifying single nucleotide
CC   polymorphisms (SNPs) of the gene. (II) is useful in screening for drugs
CC   targeting (II) that are useful for treating vascular developmental
CC   disorders. The methods are useful for improving the efficiency and
CC   reliability of several steps in the discovery and development of drugs
CC   for treating diseases associated with EDG1 activity. The haplotyping
CC   method is also used in pharmaceutical research to validate EDG1 as a
CC   candidate target for treating a specific condition or disease predicted
CC   to be associated with EDG1 activity, e.g. vascular developmental
CC   disorders, and in the design of clinical trials for treating a specific
CC   condition of disease associated with EDG1 activity. The methods are
CC   also useful for screening compounds targeting EDG1. ABK96286-ABK96332
CC   represent EDG1 gene allele-specific oligonucleotides, primer extension
CC   oligonucleotides and related PCR primers of the invention.
XX
SQ   Sequence 15 BP; 2 A; 5 C; 4 G; 3 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1725 ATGGAGATTGGCTCC 1739
              |: ||||| ||||||
Db         15 AYCGAGATGGGCTCC 1

RESULT 267
ABK81430/c
ID   ABK81430 standard; DNA; 15 BP.
XX
AC   ABK81430;
XX
DT   13-AUG-2002  (first entry)
XX
DE   SCYA20 allele specific oligonucleotide primer #10.
XX
KW   Small inducible cytokine subfamily A (Cys-Cys) member 20; SCYA20;
KW   polymorphism; haplotype; psoriasis; gene expression; ASO;
KW   allele specific oligonucleotide; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200232927-A2.
XX
PD   25-APR-2002.
XX
PF   19-OCT-2001; 2001WO-US46093.
XX
PR   19-OCT-2000; 2000US-241725P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Bieglecki KM,  Chew A,  Russo DP,  Sausker EA;
XX
DR   WPI; 2002-435525/46.
XX
PT   New genetic variants comprising haplotypes of the small inducible
PT   cytokine subfamily A, member 20 (SCYA20) gene, useful in improving the
PT   efficiency drug screening protocols for compounds (e.g. antipsoriatic
PT   drug) targeting SCYA20  -
XX
PS   Claim 14; Page 13; 62pp; English.
XX
CC   The invention describes an isolated polynucleotide, which comprises genes
CC   and haplotypes of the small inducible cytokine subfamily A (Cys-Cys),
CC   member 20 (SCYA20) gene. The polynucleotide comprises polymorphic sites
CC   referred to as PS1-9 to designate the order in which they are located in
CC   the gene. The polymorphisms and haplotypes of SCYA20 gene are useful for
CC   validating whether SCYA20 is a suitable target for drugs to treat
CC   psoriasis and disorders associated with its abnormal expression or
CC   function, screening for such drugs and reducing bias in clinical trials
CC   of such drugs. Haplotype information would be useful in improving the
CC   efficiency and output of several steps in the drug discovery and
CC   development process, including target validation, identifying lead
CC   compounds, early phase clinical trials. The methods are useful in
CC   screening for compounds targeting SCYA20 to treat a specific condition
CC   or disease predicted to be associated with SCYA20 activity, e.g.
CC   psoriasis. This sequence represents an allele specific oligonucleotide
CC   (ASO) primer used to identify polymorphisms in the SCYA20 gene.
XX
SQ   Sequence 15 BP; 5 A; 6 C; 0 G; 3 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1696 GTGGTGGAAGTTG 1708
              ||| |||||||||
Db         13 GTGATGGAAGTTG 1

RESULT 268
ABL52104/c
ID   ABL52104 standard; DNA; 15 BP.
XX
AC   ABL52104;
XX
DT   12-JUL-2002  (first entry)
XX
DE   Human PER1 allele specific oligonucleotide probe SEQ ID NO:29.
XX
KW   Human; period (Drosophila) homologue 1; PER1; polymorphic variant;
KW   polymorphic site; genotyping; haplotyping; circadian rhythm regulation;
KW   single nucleotide polymorphism; SNP; gene; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    8
FT                   /*tag=  a
FT                   /note= "polymorphic site indicated by an ambiguity base"
XX
PN   WO200222650-A2.
XX
PD   21-MAR-2002.
XX
PF   13-SEP-2001; 2001WO-US28780.
XX
PR   13-SEP-2000; 2000US-232468P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Duda A,  Kliem SE,  Koshy B;
XX
DR   WPI; 2002-393941/42.
```

```
AC   ABV99783;
XX
DT   24-FEB-2003  (first entry)
XX
DE   Human PFKFB2 allele specific oligonucleotide primer #9.
XX
KW   Human; 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2; PFKFB2;
KW   cytostatic; antidiabetic; gene therapy; cancer; diabetes; ss;
KW   ASO; allele specific oligonucleotide; primer; polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO200194363-A2.
XX
PD   13-DEC-2001.
XX
PF   07-JUN-2001; 2001WO-US18458.
XX
PR   07-JUN-2000; 2000US-209935P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Duda A,  Kazemi A,  Koshy B;
XX
DR   WPI; 2002-566434/60.
XX
PT   New 6-phosphofruoto-2-kinase/fructose-2,6-biphosphatase 2 (PFKFB2)
PT   gene variants, for improving efficiency and reliability in the
PT   development of drugs for treating diseases associated with PFKFB2
PT   activity e.g. cancer  -
XX
PS   Claim 16; Page 13; 95pp; English.
XX
CC   The invention relates to a novel human 6-phosphofructo-2-kinase/
CC   fructose-2,6-biphosphatase 2 (PFKFB2) isogene. The PFKFB2 of the
CC   invention has cytostatic and antidiabetic activity. The polynucleotides
CC   may have a use in gene therapy. The identified candidate agents targeting
CC   PFKFB2, are useful for treating cancer and diabetes. The methods of the
CC   invention are useful for improving the efficiency and reliability of
CC   several steps in the discovery and development of drugs for treating
CC   diseases associated with PFKFB2 activity. The present sequence represents
CC   a allele specific oligonucleotide (ASO) primer used in the invention to
CC   detect PFKFB2 gene polymorphisms.
XX
SQ   Sequence 15 BP; 2 A; 5 C; 4 G; 3 T; 1 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    1;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1687 TCCTCCAGCGTGGTG 1701
              | ||||||| |||:|
Db          1 TACTCCAGCCTGGYG 15


RESULT 265
ABX00692
ID   ABX00692 standard; RNA; 15 BP.
XX
AC   ABX00692;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Hepatitis C virus substrate #474 for HCV hammerhead ribozyme #474.
XX
KW   Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection;
KW   HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide;
KW   liver failure; hepatocellular carcinoma; HCV infection; drug therapy;
KW   type I interferon; interferon alpha; interferon beta; cytostatic;
KW   interferon gamma; consensus interferon; hepatotropic; antiinflammatory;
KW   substrate; hammerhead ribozyme; HH ribozyme; ss.
XX
OS   Hepatitis C virus.
XX
PN   US2002082225-A1.
XX
PD   27-JUN-2002.
XX
PF   23-MAR-1999;  99US-0274553.
XX
PR   23-MAR-1999;  99US-0274553.
XX
PA   (BLAT/) BLATT L.
PA   (MCSW/) MCSWIGGEN J A.
PA   (ROBE/) ROBERTS B.
PA   (PAVC/) PAVCO P A.
PA   (MACE/) MACEJACK D.
XX
PI   Blatt L,  McSwiggen JA,  Roberts B,  Pavco PA,  Macejack D;
XX
DR   WPI; 2002-617759/66.
XX
PT   New ribozymes targeting RNA derived from hepatitis C virus inhibit
PT   viral replication and are useful to treat hepatitis C virus infections
PT   and cirrhosis, liver failure or hepatocellular carcinoma  -
XX
PS   Claim 1; Page 34; 80pp; English.
XX
CC   The present invention relates to enzymatic nucleic acids which
CC   specifically cleave RNA derived from Hepatitis C virus (HCV). The
CC   enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or
CC   hairpin (HP) motif where the binding arms comprise sequences
CC   complementary to one of the substrate sequences defined in the
CC   specification. The HCV ribozymes are useful for modulating the
CC   expression and/or replication of HCV. They can be used to treat
CC   cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV
CC   ribozymes are also useful for treating a condition associated with
CC   HCV infection in conjunction with one or more other drug therapies,
CC   particularly type I interferon, especially interferon alpha, beta or
CC   gamma or consensus interferon. The present sequence represents a
CC   substrate for a HCV hammerhead (HH) ribozyme.
CC   Note: Some of the sequence data for this patent did not form part of
CC   the printed specification. The complete sequence data for this patent
CC   was obtained in electronic format directly from the USPTO web site
CC   at seqdata.uspto.gov/psipsDIDEntry.html.
XX
SQ   Sequence 15 BP; 2 A; 6 C; 3 G; 4 U; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   69.2%;  Pred. No. 2.6e+02;
  Matches    9;  Conservative    3;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1686 CTCCTCCAGCGTG 1698
              |:||:||| ||:|
Db          3 CUCCUCCAACGUG 15


RESULT 266
ABK96301/c
ID   ABK96301 standard; DNA; 15 BP.
XX
AC   ABK96301;
XX
DT   24-SEP-2002  (first entry)
XX
DE   EDG1 gene allele-specific oligonucleotide #16.
XX
KW   EDG1; human; haplotyping; vascular developmental disorder; PCR; primer;
KW   endothelial differentiation sphingolipid G protein-coupled receptor 1;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   WO200244200-A2.
XX
PD   06-JUN-2002.
```

```
                  |||||||||| |||
Db          3 GGAGATGGAAATT 15


RESULT 262
AAF53670
ID   AAF53670 standard; DNA; 15 BP.
XX
AC   AAF53670;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #4630.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 91; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 0 C; 5 G; 5 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
                 ||||||||| |||
Db          2 GGAGATGGAAATT 14


RESULT 263
AAF53671
ID   AAF53671 standard; DNA; 15 BP.
XX
AC   AAF53671;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #4631.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 91; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 0 C; 5 G; 5 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
                 ||||||||| |||
Db          1 GGAGATGGAAATT 13


RESULT 264
ABV99783
ID   ABV99783 standard; DNA; 15 BP.
XX
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XX
SQ   Sequence 15 BP; 5 A; 2 C; 4 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1753 TCCTAAAGGCCCA 1765
              || ||||||||||
Db         14 TCTTAAAGGCCCA 2


RESULT 260
AAF53421/c
ID   AAF53421 standard; DNA; 15 BP.
XX
AC   AAF53421;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #4381.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 89; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 4 A; 3 C; 4 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1753 TCCTAAAGGCCCA 1765
              || ||||||||||
Db         13 TCTTAAAGGCCCA 1


RESULT 261
AAF53669
ID   AAF53669 standard; DNA; 15 BP.
XX
AC   AAF53669;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #4629.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 91; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 0 C; 6 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
```

CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 5 A; 7 C; 2 G; 1 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 2.6e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1666 CACAGCTGGAACC 1678
||||||| |||| |
Db 1 CACAGCTGCAACC 13

RESULT 258
AAF53419/c
ID AAF53419 standard; DNA; 15 BP.
XX
AC AAF53419;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #4379.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 8; Page 89; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 4 A; 3 C; 4 G; 4 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 2.6e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1753 TCCTAAAGGCCCA 1765
|| |||||||||
Db 15 TCTTAAAGGCCCA 3

RESULT 259
AAF53420/c
ID AAF53420 standard; DNA; 15 BP.
XX
AC AAF53420;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #4380.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 8; Page 89; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.

```
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 4 A; 7 C; 2 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1666 CACAGCTGGAACC 1678
              ||||||||  ||||
Db          3 CACAGCTGCAACC 15


RESULT 256
AAF51494
ID   AAF51494 standard; DNA; 15 BP.
XX
AC   AAF51494;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2454.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 76; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 5 A; 7 C; 2 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1666 CACAGCTGGAACC 1678
              ||||||||  ||||
Db          2 CACAGCTGCAACC 14


RESULT 257
AAF51495
ID   AAF51495 standard; DNA; 15 BP.
XX
AC   AAF51495;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #2455.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 76; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
```

XX
DR WPI; 2000-062023/05.
XX
PT Novel ribozymes for the treatment of diseases and conditions related to
PT hepatitis C infection -
XX
PS Claim 1; Page 65; 123pp; English.
XX
CC The present sequence represents the preferred target sequence of an
CC enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
CC the Hepatitis C virus (HCV) RNA sequence at the base position given
CC in the descriptor line.
CC The HCV sequence was screened for optimal ribozyme target sites using
CC a computer folding algorithm and regions of the mRNA which did not form
CC secondary folding structures and contained potential ribozyme cleavage
CC sites were identified. Ribozymes were synthesised to target these sites
CC and their activities optimised by either varying the length of the
CC binding arms or by modification to prevent degradation by nucleases.
CC The ribozymes of the invention inhibit gene expression and/or viral
CC replication, and are used to treat diseases associated with Hepatitis C
CC virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular
CC carcinoma. The ribozymes may be used in combination with interferon to
CC treat HCV infection, other infectious diseases, autoimmune diseases, and
CC cancer.
XX
SQ Sequence 15 BP; 2 A; 6 C; 3 G; 4 U; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 15;
Best Local Similarity 69.2%; Pred. No. 2.6e+02;
Matches 9; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1686 CTCCTCCAGCGTG 1698
|:||:||| ||:|
Db 3 CUCCUCCAACGUG 15

RESULT 254
AAF47175/c
ID AAF47175 standard; DNA; 15 BP.
XX
AC AAF47175;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #595.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 7; Page 48; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 3 A; 8 C; 1 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 15;
Best Local Similarity 92.3%; Pred. No. 2.6e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1698 GGTGGAAGTTGGG 1710
|||||| |||||
Db 14 GGTGGAACTTGGG 2

RESULT 255
AAF51493
ID AAF51493 standard; DNA; 15 BP.
XX
AC AAF51493;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #2453.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 8; Page 76; 201pp; English.

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XX
PD   31-AUG-1995.
XX
PF   24-FEB-1995;   95WO-JP00285.
XX
PR   25-FEB-1994;   94JP-0028612.
XX
PA   (FUJI ) FUJISAWA PHARM CO LTD.
XX
PI   Hayashi H,  Ishii Y,  Niwa M,  Saito Y,  Yoshida M;
XX
DR   WPI; 1995-311531/40.
XX
PT   Vector containing L-sorbose and L-sorbosone dehydrogenase genes -
PT   used to transform microorganisms for the efficient production of
PT   2-keto-L-gulonic acid
XX
PS   Example 9; Page 21; 78pp; Japanese.
XX
CC   AAT04287-T04293 are primers for the G. oxydans L-sorbosone
CC   dehydrogenase (SNDH) gene. An expression vector contg. the G.
CC   oxydans L-sorbose dehydrogenase and SNDH genes arranged in
CC   sequence from a single promoter, is used to transform
CC   Gluconobacter or Acetobacter spp. hosts. The hosts then express
CC   the above dehydrogenases which are used in the prodn. of large
CC   quantities of 2-keto-gulonic acid, an ascorbic acid synthesis
CC   intermediate.
XX
SQ   Sequence 15 BP; 4 A; 1 C; 7 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1724 GATGGAGATTGGC 1736
              ||||||||  ||||
Db          2 GATGGAGAATGGC 14


RESULT 252
AAQ80594/c
ID   AAQ80594 standard; DNA; 15 BP.
XX
AC   AAQ80594;
XX
DT   25-MAR-2003  (updated)
DT   12-OCT-1995  (first entry)
XX
DE   M.tuberculosis 16S rRNA 3'-biotinylated capture probe.
XX
KW   Mycobacterium tuberculosis; 16S ribosomal RNA;
KW   strand displacement amplification; simultaneous detection;
KW   adaptor-mediated multiplex amplification; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   15
FT                   /*tag=  a
FT                   /note= "3'-biotinylated"
XX
PN   EP640691-A2.
XX
PD   01-MAR-1995.
XX
PF   16-AUG-1994;   94EP-0112741.
XX
PR   24-AUG-1993;   93US-0111076.
XX
PA   (BECT ) BECTON DICKINSON CO.
XX
PI   Jurgensen SR,  Nadeau JG,  Nycz CM,  Schram JL,  Shank DD;
PI   Spears PA, Walker GT;
XX
DR   WPI; 1995-092337/13.
XX
PT   Detection of Mycobacterium by multiplex nucleic acid
PT   amplification - by amplification of the IS6110 insertion element
PT   of M. tuberculosis, allows detection and/or identification of the
PT   M. tuberculosis complex
XX
PS   Example 3; Page 16; 23pp; English.
XX
CC   A Mycobacterium tuberculosis IS6110 amplification primer (AAQ80578)
CC   is used in a PCR and the extension product is then displaced and an
CC   IS6110 adaptor primer (AAQ80579) is hybridised to it. Following
CC   extension of the adaptor primer, the second extension product is
CC   displaced and hybridised to a M.tuberculosis 16S rRNA gene
CC   amplification primer (AAQ80582) which is then extended. The third
CC   extension product is displaced and hybridised to a 16S adaptor
CC   primer (AAQ80583) for chain extension; the fourth extension product
CC   is then displaced and is amplified simultaneously with the second
CC   extension product using the IS6110 and 16S amplification primers.
CC   The new method allows coamplification of genus- (i.e. 16S rRNA)
CC   and species- (i.e. IS6110) specific target nucleic acids by strand
CC   displacement amplification.
CC   Opt. an internal control sequence (AAQ80589) can be added to the
CC   sample prior to initial amplification. In this case, amplified
CC   target and control sequences were captured on microwell plates by
CC   hybridisation to an immobilised (via biotin-streptavidin binding)
CC   capture probe. Detector probes labelled with alkaline phosphatase
CC   were then used in a sandwich hybridisation assay to indirectly
CC   detect the amplification products.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 15 BP; 2 A; 3 C; 6 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1658 ACCAGGCTCACAG 1670
              ||||  ||||||||
Db         14 ACCACGCTCACAG 2


RESULT 253
AAZ62841
ID   AAZ62841 standard; RNA; 15 BP.
XX
AC   AAZ62841;
XX
DT   28-MAR-2000  (first entry)
XX
DE   Substrate for HH ribozyme HCV-8701 which cleaves HCV RNA at nt. 8701.
XX
KW   Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
KW   cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
KW   autoimmune disease; ss.
XX
OS   Hepatitis C virus.
XX
PN   WO9955847-A2.
XX
PD   04-NOV-1999.
XX
PF   26-APR-1999;   99WO-US09027.
XX
PR   27-APR-1998;   98US-0083217.
PR   18-SEP-1998;   98US-0100842.
PR   25-FEB-1999;   99US-0257608.
PR   23-MAR-1999;   99US-0274553.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  McSwiggen JA,  Roberts E,  Pavco PA,  Macejak D;
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Qy       1703 AAGTTGGGTTAGG 1715
              ||||||||| ||||
Db         13 AAGTTGGGGTAGG 1
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RESULT 249
AAT98901
ID   AAT98901 standard; DNA; 14 BP.
XX
AC   AAT98901;
XX
DT   23-MAR-1998  (first entry)
XX
DE   Probe 41w32 for HIV RT gene wild type E40M41.
XX
KW   Reverse transcriptase gene; HIV; RT gene; antiviral drug susceptibility;
KW   virus susceptibility; antiviral drug resistant viral strain; retrovirus;
KW   Hepadnaviridae; HIV RT genotyping; probe; ss.
XX
OS   Synthetic.
OS   Human immunodeficiency virus type 1.
XX
PN   WO9727332-A1.
XX
PD   31-JUL-1997.
XX
PF   17-JAN-1997;   97WO-EP00211.
XX
PR   25-JUN-1996;   96EP-0870081.
PR   26-JAN-1996;   96EP-0870005.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   Louwagie J,  Rossau R,  Stuyver L;
XX
DR   WPI; 1997-393716/36.
XX
PT   Determining susceptibility to antiviral drugs of reverse
PT   transcriptase containing viruses - useful for genotyping HIV RT and
PT   detecting antiviral resistant HIV
XX
PS   Claim 13; Page 36; 59pp; English.
XX
CC   This sequence represents a probe for a wild type HIV reverse
CC   transcriptase (RT) gene fragment. This sequence can be used in the method
CC   of the invention for determining the susceptibility to antiviral drugs of
CC   viruses which contain RT genes and are present in a biological sample. It
CC   comprises: (1) releasing, isolating or concentrating the polynucleic
CC   acids present in a sample; (2) amplifying the relevant part of the RT
CC   genes present with at least one suitable primer pair; (3) hybridising the
CC   polynucleic acids of step (1) or (2) with at least two RT gene probes,
CC   the probes being applied to known locations on a solid support, and are
CC   capable of simultaneously hybridising to their respective target regions
CC   under appropriate hybridisation and wash condition allowing the detection
CC   of homologous targets, or with the probes hybridising specifically with a
CC   sequence complementary to any of the target sequences; (4) detecting the
CC   hybrids formed in step (3); and (4) inferring the nucleotide sequence at
CC   the codons of interest (codons 38-44, 47-53, 65-72, 73-77, 148-154,
CC   180-187, 212-216, and 217-220), and/or the amino acids of the codons of
CC   interest and/or antiviral drug resistance spectrum, and possible the type
CC   of viral isolates involved from the differential hybridisation signals
CC   obtained in step (4). The method is specifically used to detect antiviral
CC   drug resistant strains of viruses containing RT genes, especially HIV
CC   retroviruses and Hepadnaviridae. The method can also be used for
CC   genotyping HIV RT.
XX
SQ   Sequence 14 BP; 6 A; 1 C; 5 G; 2 T; 0 other;
```

```
  Query Match             8.2%;  Score 11.4;  DB 1;  Length 14;
  Best Local Similarity   92.3%;  Pred. No. 2.4e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy       1717 GTACGGAGATGGA 1729
              |||| ||||||||
Db          1 GTACAGAGATGGA 13
```

```
RESULT 250
AAQ74479
ID   AAQ74479 standard; DNA; 15 BP.
XX
AC   AAQ74479;
XX
DT   25-MAR-2003  (updated)
DT   28-APR-1995  (first entry)
XX
DE   Primer based on plasmid constructs pSD5MRV and pSD6RRV sequences.
XX
KW   L-sorbose dehydrogenase; Gluconobacter oxydans; enzyme;
KW   L-keto-L-gulonic acid; ascorbic acid; L-sorbosone dehydrogenase;
KW   ss.
XX
OS   Synthetic.
XX
PN   WO9420609-A1.
XX
PD   15-SEP-1994.
XX
PF   08-MAR-1994;   94WO-JP00369.
XX
PR   08-MAR-1993;   93GB-0004700.
PR   28-SEP-1993;   93JP-0241851.
XX
PA   (FUJI ) FUJISAWA PHARM CO LTD.
XX
PI   Ishii Y,  Niwa M,  Saito Y,  Suzuki H,  Yoshida M;
XX
DR   WPI; 1994-303017/37.
XX
PT   Novel dehydrogenase enzymes - used in the production of
PT   L-keto-L-gulonic acid and L-ascorbic acid
XX
PS   Example 9; Page 23; 47pp; Japanese.
XX
CC   Seven primers (AAQ74479-85) were based on sequences of the constructs
CC   designated pSD5MRV and pSD6RRV and used in amplification reactions.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 15 BP; 4 A; 1 C; 7 G; 3 T; 0 other;
```

```
  Query Match             8.2%;  Score 11.4;  DB 1;  Length 15;
  Best Local Similarity   92.3%;  Pred. No. 2.6e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
Qy       1724 GATGGAGATTGGC 1736
              |||||||| ||||
Db          2 GATGGAGAATGGC 14
```

```
RESULT 251
AAT04287
ID   AAT04287 standard; DNA; 15 BP.
XX
AC   AAT04287;
XX
DT   09-APR-1996  (first entry)
XX
DE   G. oxydans T100 L-sorbosone dehydrogenase gene primer 1.
XX
KW   L-sorbosone dehydrogenase; 2-keto-gulonic acid; ascorbic acid;
KW   synthesis; recombinant production; expression vector; primer 1; ss.
XX
OS   Synthetic.
XX
PN   WO9523220-A1.
```

```
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 257094; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 1 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1710 GTTAGGAGTACGG 1722
              ||| |||||||||
Db         13 GTTTGGAGTACGG 1

RESULT 247
ABH62596
ID   ABH62596 standard; DNA; 13 BP.
XX
AC   ABH62596;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 262573 for detecting SNP TSC0001590.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 262573; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1703 AAGTTGGGTTAGG 1715
              ||||||| ||||
Db          1 AAGTTGGGGTAGG 13

RESULT 248
ABH62597/c
ID   ABH62597 standard; DNA; 13 BP.
XX
AC   ABH62597;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 262574 for detecting SNP TSC0001590.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 262574; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
ID   ABH33147 standard; DNA; 13 BP.
XX
AC   ABH33147;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 233124 for detecting SNP TSC0056884.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 233124; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1747 TCCCTATCCTAAA 1759
              | ||||||||||||
Db          1 TACCTATCCTAAA 13


RESULT 245
ABH57116
ID   ABH57116 standard; DNA; 13 BP.
XX
AC   ABH57116;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 257093 for detecting SNP TSC0062579.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 257093; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 1 C; 6 G; 4 T; 0 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1710 GTTAGGAGTACGG 1722
              ||| |||||||||
Db          1 GTTTGGAGTACGG 13


RESULT 246
ABH57117/c
ID   ABH57117 standard; DNA; 13 BP.
XX
AC   ABH57117;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 257094 for detecting SNP TSC0062579.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
```

CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1698 GGTGGAAGTTGGG 1710
||||| |||||||
Db 1 GGTGGTAGTTGGG 13

RESULT 242
ABF62159/c
ID ABF62159 standard; DNA; 13 BP.
XX
AC ABF62159;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 162156 for detecting SNP TSC0040797.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 162156; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1698 GGTGGAAGTTGGG 1710
||||| |||||||
Db 13 GGTGGTAGTTGGG 1

RESULT 243
ABH33146/c
ID ABH33146 standard; DNA; 13 BP.
XX
AC ABH33146;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 233123 for detecting SNP TSC0056884.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 233123; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e-02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1747 TCCCTATCCTAAA 1759
| ||||||||||||
Db 13 TACCTATCCTAAA 1

RESULT 244
ABH33147

KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 142167; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 2 A; 1 C; 8 G; 2 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1737 TCCCAACTCCTCC 1749
||||||| |||||
Db 13 TCCCAACGCCTCC 1

RESULT 240
ABF42171
ID ABF42171 standard; DNA; 13 BP.
XX
AC ABF42171;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 142168 for detecting SNP TSC0035612.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 142168; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 2 A; 8 C; 1 G; 2 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1737 TCCCAACTCCTCC 1749
||||||| |||||
Db 1 TCCCAACGCCTCC 13

RESULT 241
ABF62158
ID ABF62158 standard; DNA; 13 BP.
XX
AC ABF62158;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 162155 for detecting SNP TSC0040797.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 162155; 29pp + Sequence Listing; German.
XX

```
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              || ||||||||||
Db          1 CCTAACTCCTCCC 13


RESULT 237
ABF42168/c
ID   ABF42168 standard; DNA; 13 BP.
XX
AC   ABF42168;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 142165 for detecting SNP TSC0035612.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 142165; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 8 G; 3 T; 0 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1737 TCCCAACTCCTCC 1749
              ||||||| |||||
Db          13 TCCCAACACCTCC 1


RESULT 238
ABF42169
ID   ABF42169 standard; DNA; 13 BP.
XX
AC   ABF42169;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 142166 for detecting SNP TSC0035612.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 142166; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 8 C; 0 G; 2 T; 0 other;

  Query Match              8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1737 TCCCAACTCCTCC 1749
              ||||||| |||||
Db          1 TCCCAACACCTCC 13


RESULT 239
ABF42170/c
ID   ABF42170 standard; DNA; 13 BP.
XX
AC   ABF42170;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 142167 for detecting SNP TSC0035612.
XX
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PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 119304; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 7 C; 0 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1699 GTGGAAGTTGGGT 1711
              |||| ||||||||
Db         13 GTGGTAGTTGGGT 1

RESULT 235
ABF36186/c
ID   ABF36186 standard; DNA; 13 BP.
XX
AC   ABF36186;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 136183 for detecting SNP TSC0034006.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 136183; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              || ||||||||||
Db         13 CCTAACTCCTCCC 1

RESULT 236
ABF36187
ID   ABF36187 standard; DNA; 13 BP.
XX
AC   ABF36187;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 136184 for detecting SNP TSC0034006.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 136184; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
```

```
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              || ||||||||||
Db         13 CCTACTCCTCCCT 1


RESULT 232
ABF19171
ID   ABF19171 standard; DNA; 13 BP.
XX
AC   ABF19171;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 119168 for detecting SNP TSC0029760.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 119168; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              || ||||||||||
Db          1 CCTACTCCTCCCT 13


RESULT 233
ABF19306
ID   ABF19306 standard; DNA; 13 BP.
XX
AC   ABF19306;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 119303 for detecting SNP TSC0029792.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 119303; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 0 C; 7 G; 5 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1699 GTGGAAGTTGGGT 1711
              |||| ||||||||
Db          1 GTGGTAGTTGGGT 13


RESULT 234
ABF19307/c
ID   ABF19307 standard; DNA; 13 BP.
XX
AC   ABF19307;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 119304 for detecting SNP TSC0029792.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
```

PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 116649; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1739 CCAACTCCTCCCT 1751
||||||.||||||
Db 13 CCAACTACTCCCT 1

RESULT 230
ABF16653
ID ABF16653 standard; DNA; 13 BP.
XX
AC ABF16653;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 116650 for detecting SNP TSC0029189.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 116650; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1739 CCAACTCCTCCCT 1751
||||||.||||||
Db 1 CCAACTACTCCCT 13

RESULT 231
ABF19170/c
ID ABF19170 standard; DNA; 13 BP.
XX
AC ABF19170;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 119167 for detecting SNP TSC0029760.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 119167; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;

```
RESULT 227
ABF15452/c
ID   ABF15452 standard; DNA; 13 BP.
XX
AC   ABF15452;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115449 for detecting SNP TSC0028931.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115449; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 9 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              || ||||||||||
Db         13 CCCACTCCTCCCT 1


RESULT 228
ABF15453
ID   ABF15453 standard; DNA; 13 BP.
XX
AC   ABF15453;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 115450 for detecting SNP TSC0028931.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 115450; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 9 C; 0 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              || ||||||||||
Db          1 CCCACTCCTCCCT 13


RESULT 229
ABF16652/c
ID   ABF16652 standard; DNA; 13 BP.
XX
AC   ABF16652;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 116649 for detecting SNP TSC0029189.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
```

```
PS   Claim 1; SEQ ID 110340; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 6 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              |||||| ||||||
Db         13 GGAAGTAGGGTTA 1

RESULT 225
ABF10344
ID   ABF10344 standard; DNA; 13 BP.
XX
AC   ABF10344;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 110341 for detecting SNP TSC0027562.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 110341; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              |||||| ||||||
Db          1 GGAAGTGGGGTTA 13

RESULT 226
ABF10345/c
ID   ABF10345 standard; DNA; 13 BP.
XX
AC   ABF10345;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 110342 for detecting SNP TSC0027562.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 110342; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              |||||| ||||||
Db         13 GGAAGTGGGGTTA 1
```

```
DE   Oligonucleotide SEQ ID NO 93134 for detecting SNP TSC0023277.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 93134; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 9 C; 1 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              |||||| ||||||
Db          1 CCCAACGCCTCCC 13


RESULT 223
ABF10342
ID   ABF10342 standard; DNA; 13 BP.
XX
AC   ABF10342;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 110339 for detecting SNP TSC0027562.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 110339; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 6 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              |||||| ||||||
Db          1 GGAAGTAGGGTTA 13


RESULT 224
ABF10343/c
ID   ABF10343 standard; DNA; 13 BP.
XX
AC   ABF10343;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 110340 for detecting SNP TSC0027562.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
```

```
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 0 C; 9 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              |||||| ||||||
Db         13 CCCAACACCTCCC 1


RESULT 220
ABC93115
ID   ABC93115 standard; DNA; 13 BP.
XX
AC   ABC93115;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 93132 for detecting SNP TSC0023277.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 93132; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 9 C; 0 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              |||||| ||||||
Db         13 CCCAACACCTCCC 1


RESULT 221
ABC93116/c
ID   ABC93116 standard; DNA; 13 BP.
XX
AC   ABC93116;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 93133 for detecting SNP TSC0023277.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 93133; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 1 C; 9 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              |||||| ||||||
Db         13 CCCAACGCCTCCC 1


RESULT 222
ABC93117
ID   ABC93117 standard; DNA; 13 BP.
XX
AC   ABC93117;
XX
DT   21-FEB-2002  (first entry)
XX
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```
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 93129; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 0 C; 10 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              ||||||.||||||
Db         13 CCCAACCCCTCCC 1


RESULT 218
ABC93113
ID   ABC93113 standard; DNA; 13 BP.
XX
AC   ABC93113;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 93130 for detecting SNP TSC0023277.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 93130; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 10 C; 0 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCC 1750
              ||||||.||||||
Db         1 CCCAACCCCTCCC 13


RESULT 219
ABC93114/c
ID   ABC93114 standard; DNA; 13 BP.
XX
AC   ABC93114;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 93131 for detecting SNP TSC0023277.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 93131; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
```

```
  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1719 ACGGAGATGGAGA 1731
              | ||||||||||||
Db         13 AGGGAGATGGAGA 1


RESULT 215
ABC84786/c
ID   ABC84786 standard; DNA; 13 BP.
XX
AC   ABC84786;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 84803 for detecting SNP TSC0021342.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 84803; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1746 CTCCCTATCCTAA 1758
              ||||||| |||||
Db         13 CTCCCTACCCTAA 1


RESULT 216
ABC84787
ID   ABC84787 standard; DNA; 13 BP.
XX
AC   ABC84787;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 84804 for detecting SNP TSC0021342.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 84804; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1746 CTCCCTATCCTAA 1758
              ||||||| |||||
Db         13 CTCCCTACCCTAA 1


RESULT 217
ABC93112/c
ID   ABC93112 standard; DNA; 13 BP.
XX
AC   ABC93112;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 93129 for detecting SNP TSC0023277.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
```

```
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 70368; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
                ||||||| |||||
Db          1 CCAACTCTTCCCT 13


RESULT 213
ABC84686
ID   ABC84686 standard; DNA; 13 BP.
XX
AC   ABC84686;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 84703 for detecting SNP TSC0021323.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 84703; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 7 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1719 ACGGAGATGGAGA 1731
                | ||||||||||||
Db          1 AGGGAGATGGAGA 13


RESULT 214
ABC84687/c
ID   ABC84687 standard; DNA; 13 BP.
XX
AC   ABC84687;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 84704 for detecting SNP TSC0021323.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 84704; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 7 C; 0 G; 5 T; 0 other;
```

```
RESULT 210
ABC65199/c
ID   ABC65199 standard; DNA; 13 BP.
XX
AC   ABC65199;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 65216 for detecting SNP TSC0017166.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 65216; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 7 C; 0 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              || |||||||||||
Db         13 GGGAGTTGGGTTA 1

RESULT 211
ABC70350/c
ID   ABC70350 standard; DNA; 13 BP.
XX
AC   ABC70350;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 70367 for detecting SNP TSC0018290.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 70367; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              ||||||| |||||
Db         13 CCAACTCTTCCCT 1

RESULT 212
ABC70351
ID   ABC70351 standard; DNA; 13 BP.
XX
AC   ABC70351;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 70368 for detecting SNP TSC0018290.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
```

```
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 62777; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1745 CCTCCCTATCCTA 1757
              || ||||||||||
Db         13 CCCCCCTATCCTA 1


RESULT 208
ABC62761
ID   ABC62761 standard; DNA; 13 BP.
XX
AC   ABC62761;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 62778 for detecting SNP TSC0016623.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 62778; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1745 CCTCCCTATCCTA 1757
              || ||||||||||
Db         1 CCCCCCTATCCTA 13


RESULT 209
ABC65198
ID   ABC65198 standard; DNA; 13 BP.
XX
AC   ABC65198;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 65215 for detecting SNP TSC0017166.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 65215; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 7 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              || ||||||||||
Db         1 GGGAGTTGGGTTA 13
```

DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 62607 for detecting SNP TSC0016595.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 62607; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1701 GGAAGTTGGGTTA 1713
||||| ||||||
Db 1 GGAAGGTGGGTTA 13

RESULT 206
ABC62591/c
ID ABC62591 standard; DNA; 13 BP.
XX
AC ABC62591;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 62608 for detecting SNP TSC0016595.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 62608; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1701 GGAAGTTGGGTTA 1713
||||| ||||||
Db 13 GGAAGGTGGGTTA 1

RESULT 207
ABC62760/c
ID ABC62760 standard; DNA; 13 BP.
XX
AC ABC62760;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 62777 for detecting SNP TSC0016623.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine

```
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 7 C; 0 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1707 TGGGTTAGGAGTA 1719
              |||||| ||||||
Db         13 TGGGTTGGGAGTA 1

RESULT 203
ABC49590/c
ID   ABC49590 standard; DNA; 13 BP.
XX
AC   ABC49590;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 49607 for detecting SNP TSC0014014.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 49607; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1745 CCTCCCTATCCTA 1757
              |||| ||||||||
Db         13 CCTCTCTATCCTA 1

RESULT 204
ABC49591
ID   ABC49591 standard; DNA; 13 BP.
XX
AC   ABC49591;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 49608 for detecting SNP TSC0014014.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 49608; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1745 CCTCCCTATCCTA 1757
              |||| ||||||||
Db          1 CCTCTCTATCCTA 13

RESULT 205
ABC62590
ID   ABC62590 standard; DNA; 13 BP.
XX
AC   ABC62590;
XX
```

```
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 38222; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1744 TCCTCCCTATCCT 1756
              ||| |||||||||
Db          1 TCCCCCCTATCCT 13


RESULT 201
ABC47948
ID   ABC47948 standard; DNA; 13 BP.
XX
AC   ABC47948;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 47965 for detecting SNP TSC0013727.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 47965; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 7 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1707 TGGGTTAGGAGTA 1719
              ||||||  ||||||
Db          1 TGGGTTGGGAGTA 13


RESULT 202
ABC47949/c
ID   ABC47949 standard; DNA; 13 BP.
XX
AC   ABC47949;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 47966 for detecting SNP TSC0013727.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 47966; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
```

```
XX
SQ   Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              ||| |||||||||
Db         13 CCATCTCCTCCCT 1


RESULT 198
ABC26849
ID   ABC26849 standard; DNA; 13 BP.
XX
AC   ABC26849;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 26866 for detecting SNP TSC0007227.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 26866; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 1 A; 8 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              ||| |||||||||
Db          1 CCATCTCCTCCCT 13


RESULT 199
ABC38204/c
ID   ABC38204 standard; DNA; 13 BP.
XX
AC   ABC38204;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 38221 for detecting SNP TSC0011836.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 38221; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 8 G; 1 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1744 TCCTCCCTATCCT 1756
              ||| |||||||||
Db         13 TCCCCCCTATCCT 1


RESULT 200
ABC38205
ID   ABC38205 standard; DNA; 13 BP.
XX
AC   ABC38205;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 38222 for detecting SNP TSC0011836.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
```

PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 25875; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1745 CCTCCCTATCCTA 1757
||||||||| ||||
Db 13 CCTCCCTAACCTA 1

RESULT 196
ABC25859
ID ABC25859 standard; DNA; 13 BP.
XX
AC ABC25859;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 25876 for detecting SNP TSC0006598.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 25876; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1745 CCTCCCTATCCTA 1757
||||||||| ||||
Db 1 CCTCCCTAACCTA 13

RESULT 197
ABC26848/c
ID ABC26848 standard; DNA; 13 BP.
XX
AC ABC26848;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 26865 for detecting SNP TSC0007227.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 26865; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.

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                  ||||||||| |||
Db          13 GGAAGTTGGATTA 1


RESULT 193
ABC25064
ID   ABC25064 standard; DNA; 13 BP.
XX
AC   ABC25064;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25081 for detecting SNP TSC0006096.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 25081; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1697 TGGTGGAAGTTGG 1709
              | ||||||||||||
Db          1 TAGTGGAAGTTGG 13


RESULT 194
ABC25065/c
ID   ABC25065 standard; DNA; 13 BP.
XX
AC   ABC25065;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25082 for detecting SNP TSC0006096.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 25082; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1697 TGGTGGAAGTTGG 1709
              | ||||||||||||
Db          13 TAGTGGAAGTTGG 1


RESULT 195
ABC25858/c
ID   ABC25858 standard; DNA; 13 BP.
XX
AC   ABC25858;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 25875 for detecting SNP TSC0006598.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
```

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PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 16700; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 1 G; 2 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1709 GGTTAGGAGTACG 1721
              ||||||||||  ||
Db         13 GGTTAGGAGTTCG 1


RESULT 191
ABC23224
ID   ABC23224 standard; DNA; 13 BP.
XX
AC   ABC23224;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 23241 for detecting SNP TSC0004727.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 23241; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
              ||||||||| |||
Db          1 GGAAGTTGGATTA 13


RESULT 192
ABC23225/c
ID   ABC23225 standard; DNA; 13 BP.
XX
AC   ABC23225;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 23242 for detecting SNP TSC0004727.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 23242; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTA 1713
```

```
AC   ABC08447;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 8438 for detecting SNP TSC0002329.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 8438; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1747 TCCCTATCCTAAA 1759
              ||| |||||||||
Db          1 TCCATATCCTAAA 13


RESULT 189
ABC16692
ID   ABC16692 standard; DNA; 13 BP.
XX
AC   ABC16692;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 16699 for detecting SNP TSC0003627.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 16699; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 1 C; 6 G; 4 T; 0 other;

  Query Match             8.2%;  Score 11.4;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 2.1e+02;
  Matches   12;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1709 GGTTAGGAGTACG 1721
              |||||||||| ||
Db          1 GGTTAGGAGTTCG 13


RESULT 190
ABC16693/c
ID   ABC16693 standard; DNA; 13 BP.
XX
AC   ABC16693;
XX
DT   20-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 16700 for detecting SNP TSC0003627.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
```

Best Local Similarity 91.7%; Pred. No. 2.4e+02;
Matches 11; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```
Qy       1731 ATTGGCTCCCAA 1742
              ||||||:||||
Db          1 ATTGGCTYCCAA 12
```

RESULT 186
AAA06017/c
ID AAA06017 standard; DNA; 13 BP.
XX
AC AAA06017;
XX
DT 14-JUN-2000 (first entry)
XX
DE CFTR gene analysis oligonucleotide probe SEQ ID NO:27.
XX
KW CFTR; cystic fibrosis transmembrane conductance regulator; detection;
KW mutation; probe; human; hybridisation; ss.
XX
OS Homo sapiens.
XX
PN US6027880-A.
XX
PD 22-FEB-2000.
XX
PF 10-OCT-1995; 95US-0544381.
XX
PR 26-OCT-1993; 93US-0143312.
PR 02-AUG-1994; 94US-0284064.
PR 26-OCT-1994; 94WO-US12305.
PR 02-AUG-1995; 95US-0510521.
XX
PA (AFFY-) AFFYMETRIX INC.
XX
PI Huang XC, Chee M, Lobban PE, Hubbell EA, Sheldon EL, Miyada CG;
PI Cronin MT, Lipshutz RJ, Morris MS, Fodor SPA;
XX
DR WPI; 2000-194825/17.
XX
PT An array of nucleic acid probes immobilized on a solid support, useful
PT for identifying mutations in the cystic fibrosis transmembrane
PT conductance regulator -
XX
PS Disclosure; Column 75; 114pp; English.
XX
CC The present invention describes an array of nucleic acid probes
CC immobilised on a solid support, which comprises: (1) a first probe set,
CC comprising probes with a segment of at least 6 nucleotides complementary
CC to the CFTR (cystic fibrosis transmembrane conductance regulator) gene,
CC where the segment includes at least 1 interrogation position
CC complementary to a nucleotide in the CFTR gene sequence; and (2) second,
CC third and fourth probe sets, each comprising probes identical to those
CC in (1) except that the interrogation position is occupied by a different
CC nucleotide. AAA05991 to AAA06240 represent CFTR gene analysis
CC oligonucleotide probes for use in the exemplification of the present
CC invention. The present invention also describes a method of comparing a
CC target nucleic acid with a reference sequence consisting of a
CC predetermined sequence of nucleotides, comprising: (a) hybridising a
CC sample comprising the target nucleic acid to an array of nucleic acid
CC probes immobilised on a solid support; (b) comparing the relative
CC specific binding of two corresponding probes from the first and second
CC probe sets; (c) assigning a nucleotide in the target sequence as the
CC complement of the interrogation position of the probe having the greater
CC specific binding; and (d) repeating (b) and (c) by comparing the relative
CC specific binding of a further two corresponding probes from the first and
CC second probe sets until each nucleotide of interest in the target
CC sequence has been assigned. The array is useful for analysis of the CFTR
CC gene, e.g. detection of mutations.
XX
SQ Sequence 13 BP; 0 A; 4 C; 4 G; 5 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy       1649 AAGGCAAGCACCA 1661
              | ||||||||||||
Db         13 AGGGCAAGCACCA 1
```

RESULT 187
ABC08446/c
ID ABC08446 standard; DNA; 13 BP.
XX
AC ABC08446;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 8437 for detecting SNP TSC0002329.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 8437; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 other;

Query Match 8.2%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 2.1e+02;
Matches 12; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

```
Qy       1747 TCCCTATCCTAAA 1759
              ||| |||||||||
Db         13 TCCATATCCTAAA 1
```

RESULT 188
ABC08447
ID ABC08447 standard; DNA; 13 BP.
XX

```
CC   materials. This sequence represents a primer used in the isolation of a
CC   sphingolipid desaturase protein sld1 homologue fragment isolated from
CC   Halianthus annuus which is used in the method of the invention.
XX
SQ   Sequence 15 BP; 2 A; 0 C; 7 G; 3 T; 3 other;

  Query Match             8.3%;  Score 11.6;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 2.4e+02;
  Matches   11;  Conservative    2;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1694 GCGTGGTGGAAGTTG 1708
              |: ||||||||:| |
Db          1 GSNTGGTGGAARTGG 15


RESULT 184
ABN81456/c
ID   ABN81456 standard; DNA; 15 BP.
XX
AC   ABN81456;
XX
DT   16-AUG-2002  (first entry)
XX
DE   Human HTATIP allele specific PCR primer SEQ ID NO 57.
XX
KW   Human; HIV-1 Tat interactive protein; HTATIP); haplotyping;
KW   genotyping; transgenic; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200229089-A2.
XX
PD   11-APR-2002.
XX
PF   05-OCT-2001; 2001WO-US31593.
XX
PR   06-OCT-2000; 2000US-238655P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Armstrong B,  Bentivegna SC,  Choi JY,  Gilson CR,  Parks KE;
PI   Sausker EA;
XX
DR   WPI; 2002-330173/36.
XX
PT   New HIV-1 tat interactive protein, 60 kDa (HTATIP) gene polymorphic
PT   variants, for studying the expression and function of HTATIP and
PT   screening candidate drugs for treating familial glucocorticoid
PT   deficiency and cancer -
XX
PS   Claim 14; Page 14; 89pp; English.
XX
CC   The invention relates to novel genetic variants of the HIV-1 Tat
CC   interactive protein, 60 KDa (HTATIP) gene. The polymorphic variants are
CC   useful in studying the expression and function of HTATIP, in expressing
CC   HTATIP protein for use in screening for candidate drugs to treat diseases
CC   related to HTATIP activity, in studying the effect of the variation on
CC   the biological activity of HTATIP and the binding affinity of candidate
CC   drugs targeting HTATIP for the treatment of disorders. Haplotyping
CC   methods are useful in validating HTATIP as a candidate target for
CC   treating a specific condition or disease predicted to be associated with
CC   HTATIP activity or in the design of clinical trials of candidate drugs
CC   for treating a specific condition or disease associated with HTATIP
CC   activity. Transgenic animals are useful for studying expression of the
CC   HTATIP isogenes in vivo, for in vivo screening and testing of drugs
CC   targeted against HTATIP protein and for testing the efficacy of
CC   therapeutic agents and compounds for disorders. The present sequence is
CC   that of a HTATIP allele specific PCR primer of the invention.
XX
SQ   Sequence 15 BP; 3 A; 3 C; 6 G; 2 T; 1 other;

  Query Match             8.3%;  Score 11.6;  DB 1;  Length 15;
  Best Local Similarity   91.7%;  Pred. No. 2.4e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1657 CACCAGGCTCAC 1668
              |:||||||||||
Db         15 CRCCAGGCTCAC 4


RESULT 185
ABL36320
ID   ABL36320 standard; DNA; 15 BP.
XX
AC   ABL36320;
XX
DT   22-APR-2002  (first entry)
XX
DE   Human lysosomal acid phosphatase 2 (ACP2) allele-specific probe 21.
XX
KW   Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11;
KW   lysosome-specific enzyme; orthophosphoric monoester hydrolysis;
KW   Hodgkin's disease; HD; acid phosphatase deficiency;
KW   novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism;
KW   transgenic animal; primer; probe; primer-extension oligonucleotide;
KW   SNP; single nucleotide polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO200194362-A2.
XX
PD   13-DEC-2001.
XX
PF   07-JUN-2001; 2001WO-US18457.
XX
PR   07-JUN-2000; 2000US-210047P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kliem SE,  Messer C,  Tanguay DA;
XX
DR   WPI; 2002-154563/20.
XX
PT   Novel genetic variants of acid phosphatase 2, lysosomal polypeptide
PT   gene useful in studying expression and function of the protein, and for
PT   screening drugs to treat diseases e.g. Hodgkin's disease  -
XX
PS   Claim 17; Page 14; 109pp; English.
XX
CC   The invention comprises the human lysosomal acid phosphatase 2 (ACP2)
CC   nucleic acid and protein sequences. Specifically, the invention relates
CC   to the discovery of 22 novel polymorphic sites within the APC2 gene. The
CC   invention also comprises methods for haplotyping and genotyping the ACP2
CC   gene in an individual. The ACP2 gene (located on chromosome 11) encodes a
CC   lysosomal-specific enzyme that catalyses the hydrolysis of
CC   orthophosphoric monoesters to alcohol and phosphate. The ACP2 gene and
CC   protein are pharmaceutically important in the treatment of Hodgkin's
CC   disease (HD) and acid phosphatase deficiency. The novel ACP2 gene
CC   polymorphisms of the invention are useful in haplotyping the ACP2 gene.
CC   ACP2 haplotyping is useful in validating ACP2 as a target (and designing
CC   drugs) for treating an ACP2-related disease or condition (e.g. Hodgkin's
CC   disease and acid phosphatase deficiency). The ACP2 gene polymorphisms are
CC   useful for ACP2 genotyping, which can also be used to develop diagnostic
CC   tests and therapeutic treatments. The ACP2 protein and nucleic acids of
CC   the invention are useful in the production of a transgenic animal which
CC   expresses ACP2 protein. The ACP2 nucleic acids of the invention are
CC   useful in the production of allele-specific oligonucleotides designed to
CC   genotype each of the ACP2 polymorphisms. Nucleic acids ABL36299-ABL36320
CC   represent claimed ACP2 allele-specific probes. Nucleic acids ABL36321-
CC   ABL36364 represent claimed ACP2 allele-specific PCR primers. Nucleic
CC   acids ABL36365-ABL36408 represent claimed ACP2 primer-extension
CC   oligonucleotides.
XX
SQ   Sequence 15 BP; 4 A; 3 C; 4 G; 3 T; 1 other;

  Query Match             8.3%;  Score 11.6;  DB 1;  Length 15;
```

```
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 266129; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 1 other;

  Query Match             8.3%;  Score 11.6;  DB 1;  Length 13;
  Best Local Similarity   91.7%;  Pred. No. 1.9e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGATT 1733
              ||||||||||| :
Db          2 GAGATGGAGATY 13


RESULT 182
ABH66153/c
ID   ABH66153 standard; DNA; 13 BP.
XX
AC   ABH66153;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 266130 for detecting SNP TSC0064482.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 266130; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 5 C; 0 G; 4 T; 1 other;

  Query Match             8.3%;  Score 11.6;  DB 1;  Length 13;
  Best Local Similarity   91.7%;  Pred. No. 1.9e+02;
  Matches   11;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGATT 1733
              ||||||||||| :
Db          12 GAGATGGAGATY 1


RESULT 183
AAZ44834
ID   AAZ44834 standard; DNA; 15 BP.
XX
AC   AAZ44834;
XX
DT   27-APR-2000  (first entry)
XX
DE   H. annuus sld1 homologue primer BN1.
XX
KW   Sphingolipid desaturase; sld1; sphingobase; ceramide; capnoid;
KW   transgenic plant; crop plant; delta-8-unsaturated long-chain base;
KW   tolerance; resistance; soil salinity; ion stress; toxicity; drought;
KW   cold; frost; phytopathogenic microorganism; flowering time; cosmetic;
KW   pharmaceutical; food; chemical raw material; primer; ss.
XX
OS   Helianthus annuus.
XX
PN   DE19828850-A1.
XX
PD   30-DEC-1999.
XX
PF   27-JUN-1998;   98DE-1028850.
XX
PR   27-JUN-1998;   98DE-1028850.
XX
PA   (GVSE-) GVS GES ERWERB & VERW LANDWIRTSCHAFTLICH.
XX
PI   Heinz E,  Zaehringer U,  Schmidt H,  Sperling P;
XX
DR   WPI; 2000-127549/12.
XX
PT   New sphingolipid desaturase that selectively introduces double bond
PT   into sphingolipids and capnoids -
XX
PS   Example 1; Page 24; 62pp; German.
XX
CC   This invention describes a novel sphingolipid desaturase that selectively
CC   introduces a double bond into the sphingobase of the ceramide residue of
CC   sphingolipids and capnoids. A DNA sequence encoding the sphingolipid
CC   desaturase, or a vector containing the DNA sequence, can be used to
CC   produce transgenic plants, especially crop plants, with an increased or
CC   decreased delta-8-unsaturated long-chain base content or an altered
CC   delta-8-unsaturated long-chain base cis/trans ratio, especially to
CC   compensate for a delta-8-unsaturated long-chain base deficiency, to
CC   exclude production of delta-8-unsaturated bases, to increase tolerance
CC   or resistance to soil salinity, ion stress or toxicity, drought, wet
CC   conditions, cold or frost and/or phytopathogenic microorganisms, or to
CC   alter size growth and flowering time. Cells, transgenic organisms or
CC   plants containing the DNA sequence can be used to produce sphingolipids
CC   and capnoids with unsaturated sphingobases. The sphingolipids or capnoids
CC   can be used in cosmetics, pharmaceuticals and foods and as chemical raw
```

OS Unidentified.
XX
PN WO2003012143-A1.
XX
PD 13-FEB-2003.
XX
PF 16-JUL-2002; 2002WO-US22555.
XX
PR 16-JUL-2001; 2001US-305153P.
PR 20-JUL-2001; 2001US-306440P.
PR 13-NOV-2001; 2001US-331285P.
PR 19-DEC-2001; 2001US-340843P.
PR 19-DEC-2001; 2001US-340844P.
XX
PA (PRIC-) PRICE FOUND LTD.
XX
PI Bergen AW, Yeager M;
XX
DR WPI; 2003-268122/26.
XX
PT New nucleic acid molecule having polymorphisms in the serotonin
PT receptor 1D, delta-opioid receptor, or dopamine receptor D2, useful in
PT diagnostic and prognostic assays for eating disorders, such as anorexia
PT and bulimia nervosa -
XX
PS Example 3; Page 60; 149pp; English.
XX
CC The invention relates to a novel isolated nucleic acid molecule
CC comprising a variant gene associated with an eating disorder and selected
CC from any of 119 polymorphisms with their corresponding genotyping in
CC dataset, alleles and HGBASE identification, given in the specification.
CC The novel nucleic acid molecule has polymorphisms in the serotonin
CC receptor 1D, delta-opioid receptor, or dopamine receptor D2, which is
CC useful in diagnostic and prognostic assays for eating disorders, in
CC particular anorexia nervosa and bulimia nervosa. This polynucleotide
CC sequence represents a opioid receptor 1D PCR primer of the invention.
XX
SQ Sequence 16 BP; 4 A; 5 C; 3 G; 4 T; 0 other;

Query Match 8.5%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1662 GGCTCACAGCTGGAA 1676
||||||| ||| ||
Db 2 GGCTCACACCTGTAA 16

RESULT 180
ABX14989
ID ABX14989 standard; DNA; 16 BP.
XX
AC ABX14989;
XX
DT 14-MAR-2003 (first entry)
XX
DE Human delta opioid receptor OPRD1-1 SNP genotyping PCR primer #1.
XX
KW Human; delta opioid receptor; OPRD1-1; ss; PCR; primer; SNP;
KW single nucleotide polymorphism; eating disorder; anorexia nervosa;
KW energy homeostasis disorder; chromosome 1.
XX
OS Homo sapiens.
XX
PN WO200292838-A2.
XX
PD 21-NOV-2002.
XX
PF 13-MAY-2002; 2002WO-US14940.
XX
PR 11-MAY-2001; 2001US-290016P.
XX
PA (BIOI-) BIOINVEST LTD.
XX
PI Bergen AW;
XX
DR WPI; 2003-129306/12.
XX
PT New isolated nucleic acid molecule encoding a delta opioid receptor
PT variant associated with an eating or energy homeostasis disorder,
PT useful for diagnosing a genetic predisposition to such disorder, e.g.
PT anorexia nervosa -
XX
PS Example; Page 19; 39pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule encoding a
CC delta opioid receptor variant associated with an eating or energy
CC homeostasis disorder. Also included are a delta opioid receptor variant
CC encoded by the nucleic acid, an isolated antibody that specifically
CC recognises the delta opioid receptor variant, a vector comprising the
CC nucleic acid, a host cell transformed to contain the vector, producing
CC the polypeptide by culturing the host cell, identifying an agent which
CC modulates the expression of the nucleic acid, diagnosing a genetic
CC predisposition to an eating or energy homeostasis disorder by detecting
CC the presence or absence of the variant nucleic acid in a patient sample,
CC an allele specific primer that detects a polymorphism in the gene
CC encoding a delta opioid receptor associated with an eating or energy
CC homeostasis disorder and a non-human transgenic animal modified to
CC contain the variant nucleic acids. The variants are named OPRD1-1
CC to OPRD1-8. The human opioid receptor gene is located on chromosome 1.
CC The nucleic acid molecules and delta opioid receptor variant are
CC useful for diagnosing a genetic predisposition to an eating or energy
CC homeostasis disorder, such as anorexia nervosa. The allele specific
CC primer is useful for detecting polymorphism in the gene encoding a
CC delta opioid receptor associated with the disorder cited.
CC The present sequence is a genotyping PCR primer for detecting the
CC presence of a particular SNP (single nucleotide polymorphism) in a
CC sample.
XX
SQ Sequence 16 BP; 4 A; 5 C; 3 G; 4 T; 0 other;

Query Match 8.5%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 2.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1662 GGCTCACAGCTGGAA 1676
||||||| ||| ||
Db 2 GGCTCACACCTGTAA 16

RESULT 181
ABH66152
ID ABH66152 standard; DNA; 13 BP.
XX
AC ABH66152;
XX
DT 22-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 266129 for detecting SNP TSC0064482.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX

```
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches   2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACA 1669
              | |||| ||||||||
Db         15 AACACCCGGCTCACA 1


RESULT 177
AAZ88440/c
ID   AAZ88440 standard; DNA; 16 BP.
XX
AC   AAZ88440;
XX
DT   08-MAY-2000  (first entry)
XX
DE   Exemplary texaphyrin oligonucleotide conjugate SEQ ID NO:6.
XX
KW   Texaphyrin; metal complex; catalytic; RNA hydrolysis; virucide;
KW   antibacterial; cytostatic; antiinflammatory; antitumour;
KW   antiviral; ss.
XX
OS   Synthetic.
XX
PN   US6022959-A.
XX
PD   08-FEB-2000.
XX
PF   20-NOV-1997;   97US-0975522.
XX
PR   20-AUG-1996;   96US-0077185.
PR   20-AUG-1997;   97WO-US14682.
XX
PA   (PHAR-) PHARMACYCLICS INC.
XX
PI   Wright M,  Crofts SP,  Magda D;
XX
DR   WPI; 2000-160391/14.
XX
PT   Texaphyrin metal complex derivatized ribonucleic acids possessing
PT   hydrolytic cleavage activity against RNA are useful as e.g. antiviral,
PT   antibacterial, antitumor and antiinflammatory agents -
XX
PS   Example 4; Column 33; 30pp; English.
XX
CC   The present invention describes a conjugate with hydrolytic cleavage
CC   activity for ribonucleic acid (RNA), which comprises a texaphyrin metal
CC   complex bound to an internal linkage of an oligonucleotide or
CC   oligonucleotide analogue. AAZ88435 to AAZ88440 represent exemplary
CC   texaphyrin oligonucleotide conjugates used in the exemplification of the
CC   present invention. The novel conjugates have virucide, antibacterial,
CC   cytostatic and antiinflammatory properties, and are involved in RNA
CC   hydrolysis. The conjugates are useful for inhibiting the expression of
CC   a gene by targeted intracellular mRNA (messenger ribonucleic acid)
CC   hydrolysis. The conjugates have applications for anti-viral and
CC   anti-bacterial therapy as well as cancers and inflammatory responses
CC   caused by overexpression of certain proteins.
XX
SQ   Sequence 16 BP; 1 A; 2 C; 8 G; 5 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches   2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACA 1669
              | |||| ||||||||
Db         15 AACACCCGGCTCACA 1


RESULT 178
AAZ97664
ID   AAZ97664 standard; DNA; 16 BP.
XX
AC   AAZ97664;
XX
DT   26-APR-2000  (first entry)
XX
DE   HIV-1 protease gene probe SEQ ID NO:154.
XX
KW   Human immunodeficiency virus; HIV; protease; probe; detection;
KW   drug selected mutation; hybridisation; genotyping; infection;
KW   drug resistance; ss.
XX
OS   Human immunodeficiency virus type 1.
XX
PN   WO9967428-A2.
XX
PD   29-DEC-1999.
XX
PF   22-JUN-1999;   99WO-EP04317.
XX
PR   24-JUN-1998;   98EP-0870143.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   Stuyver L;
XX
DR   WPI; 2000-147219/13.
XX
PT   Detection of drug-selected mutations in the HIV protease gene used to
PT   treat HIV infections -
XX
PS   Claim 3; Page 35; 76pp; English.
XX
CC   The present invention describes the detection of drug-selected mutations
CC   in the HIV protease gene. The method of detection allows the
CC   simultaneous characterisation of a range of codons involved in drug
CC   resistance using sets of probes optimised to function together in a
CC   reverse-hybridisation assay. AAZ97517 tc AAZ97997 represent specifically
CC   claimed probes for use in the assay, and AAZ97479 to AAZ97501 represent
CC   specifically claimed HIV protease gene polymorphic nucleotide sequences.
CC   AAZ97502 to AAZ97515, and AAZ98004 to AAZ98007, represent PCR primers for
CC   the HIV protease gene, and AAZ97516 represents an HIV protease probe used
CC   in an example from the present invention. The method, probes and primers
CC   can be used for the detection of drug-selected mutations in the HIV
CC   protease gene. The method allows the simultaneous characterisation of a
CC   range of codons involved in drug resistance. The method may also be used
CC   for HIV protease genotyping assays. The probes are able to discriminate
CC   between wild type and mutated protease sequences. The method allows rapid
CC   and reliable detection of drug-selected mutation in HIV.
XX
SQ   Sequence 16 BP; 2 A; 0 C; 10 G; 4 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches   2;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATTGG 1735
              |||| |||| ||||
Db          2 GGAGTTGGAGGTTGG 16


RESULT 179
ABT34281
ID   ABT34281 standard; DNA; 16 BP.
XX
AC   ABT34281;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Opioid receptor D1 PCR primer SEQ ID No 67.
XX
KW   Eating disorder; polymorphism; dataset; allele; HGBASE identification;
KW   serotonin receptor 1D; delta-opioid receptor; dopamine receptor D2;
KW   anorexia nervosa; bulimia nervosa; PCR; primer; ss.
XX
```

```
                  | ||||  ||||||||
Db         15 AACACCCGGCTCACA 1


RESULT 175
AAV07300/c
ID   AAV07300 standard; DNA; 16 BP.
XX
AC   AAV07300;
XX
DT   14-AUG-1998  (first entry)
XX
DE   Metallotexaphyrin-oligonucleotide conjugate #14.
XX
KW   Metallotexapyrin; dysprosium; europium; conjugate; RNase H;
KW   antisense therapy; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base=
FT                   /note= "DyTxNH-(CH2)6-PO4-thymine, where DyTx is
FT                          dysprosium (III) texaphyrin"
XX
PN   US5763172-A.
XX
PD   09-JUN-1998.
XX
PF   07-JUN-1995;   95US-0486962.
XX
PR   07-JUN-1995;   95US-0485581.
PR   21-JAN-1992;   92US-0822964.
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
PR   09-JUN-1994;   94WO-US06284.
PR   26-MAY-1995;   95US-0452261.
PR   07-JUN-1995;   95US-0486962.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Magda D,  Miller RA,  Sessler JL,  Wright M;
XX
DR   WPI; 1998-347306/30.
XX
PT   Enhancing therapeutic activity of oligonucleotides in cells - using
PT   conjugate comprising metallotexaphyrin, which hydrolyses phosphate
PT   ester bonds of RNA, and oligo-nucleotide, which binds to targetted
PT   RNA
XX
PS   Example 6; Figure 5; 34pp; English.
XX
CC   The invention relates to a method of enhancing the therapeutic activity
CC   of oligonucleotides in cells. It comprises contacting a targeted
CC   intracellular RNA in a cell with a metallotexaphyrin-oligonucleotide
CC   conjugate. The contact is carried out under physiological conditions for
CC   a time sufficient to hydrolyse the phosphate ester bond of the targeted
CC   RNA. The metallotexaphyrin of the conjugate has catalytic activity for
CC   phosphate ester bond hydrolysis. The oligonucleotide of the conjugate
CC   has complementary binding affinity to the targeted RNA. The conjugate
CC   may be used in antisense therapies for treating, e.g. cancer, viral
CC   infections, autoimmune diseases and restenosis. The conjugate may also
CC   be used as hydrolysis reagents for the detoxification of di- and
CC   trialkyl phosphate esters, which are used in solvents, insecticides and
CC   chemical nerve gases. The metallotexaphyrin complex enhances the
CC   therapeutic activity of the oligonucleotide, not only by facilitating
CC   cellular uptake of the oligonucleotide but also by hydrolysing target
CC   RNA within the cell, independent of RNase H. Attachment to the complex
CC   may also cause the oligonucleotide to take on some of the pharmacodynamic
CC   an biodistribution properties of the texaphyrin, such as selective
CC   localisation in tumours. The present sequence represents a metallo-
CC   texaphyrin-oligonucleotide conjugate.
XX
SQ   Sequence 16 BP; 1 A; 2 C; 8 G; 5 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACA 1669
                | ||||  ||||||||
Db         15 AACACCCGGCTCACA 1


RESULT 176
AAV07038/c
ID   AAV07038 standard; DNA; 16 BP.
XX
AC   AAV07038;
XX
DT   08-JUL-1998  (first entry)
XX
DE   Texaphyrin oligonucleotide conjugate.
XX
KW   Texaphyrin oligonucleotide conjugate; dysprosium; metal complex;
KW   hydrolytic cleavage activity; ribonucleic acid cleavage; RNA; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /note= "A texaphyrin dysprosium metal complex, bound to
FT                          thymine via a linking phosphate group"
XX
PN   WO9807733-A1.
XX
PD   26-FEB-1998.
XX
PF   20-AUG-1997;   97WO-US14682.
XX
PR   20-AUG-1996;   96US-0700277.
XX
PA   (PHAR-) PHARMACYCLICS INC.
XX
PI   Crofts SP,  Magda D,  Wright M;
XX
DR   WPI; 1998-179049/16.
XX
PT   New conjugates which have hydrolytic cleavage activity for RNA -
PT   comprise a texaphyrin metal complex bound to an internal linkage of
PT   an oligonucleotide
XX
PS   Example 4; Page 53; 77pp; English.
XX
CC   This sequence is shown in the specification. The invention relates to a
CC   texaphyrin oligonucleotide conjugate, which has hydrolytic cleavage
CC   activity for ribonucleic acid (RNA). It comprises a texaphyrin
CC   metal complex bound to an internal linkage of an oligonucleotide or
CC   oligonucleotide analogue. The conjugates may be used for the destruction
CC   of retroviral RNA, messenger RNA, ribosomal RNA, RNA cofactors, transfer
CC   RNA, small nuclear RNA and small cytoplasmic RNA. They may be used for
CC   eliminating diseased or cancerous cells or tissues, in blood
CC   purification protocols (in vivo or in vitro), in antiviral treatments,
CC   or as diagnostic probes (e.g. in determination of the nucleotide
CC   sequence of RNA or to detect polymorphisms in RNA). Administration of
CC   the conjugates is, e.g., oral, topical or parenteral, especially topical
CC   or intravenous. The conjugates are especially effective under conditions
CC   where the concentration of RNA target exceeds that of available
CC   conjugate.
XX
SQ   Sequence 16 BP; 1 A; 2 C; 8 G; 5 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 16;
```

```
SQ   Sequence 15 BP; 0 A; 6 C; 3 G; 5 T; 1 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1677 CCCTGGTGTCTCCTC 1691
              ||||||||||| | |
Db          1 CCCTGGTGTCTTCRC 15


RESULT 173
AAS99376/c
ID   AAS99376 standard; DNA; 15 BP.
XX
AC   AAS99376;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Aldehyde dehydrogenase 5 family, member A1, oligonucleotide #69.
XX
KW   Aldehyde dehydrogenase 5 family member A1; ALDH5A1;
KW   succinate-semialdehyde dehydrogenase; gene therapy; primer;
KW   antisense technology; allele specific oligonucleotide; ASO;
KW   4-hydroxybutyric aciduria; metabolic disease; transgenic animal;
KW   ss.
XX
OS   Synthetic.
XX
PN   WO200190119-A2.
XX
PD   29-NOV-2001.
XX
PF   21-MAY-2001; 2001WO-US16558.
XX
PR   19-MAY-2000; 2000US-205849P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Kliem SE,  Koshy B,  Tanguay DA;
XX
DR   WPI; 2002-089912/12.
XX
PT   New genetic variants of human aldehyde dehydrogenase 5 family, member
PT   A1, ALDH5A1 gene for treating metabolic diseases and for expressing
PT   ALDH5A1 protein useful in identifying drugs to treat 4-hydroxybutyric
PT   aciduria  -
XX
PS   Claim 16; Page 14; 151pp; English.
XX
CC   The invention describes an isolated polynucleotide comprising a
CC   nucleotide sequence which is a polymorphic variant of a reference
CC   sequence for the aldehyde dehydrogenase 5 family, member A1
CC   (succinate-semialdehyde dehydrogenase) (ALDH5A1) gene or its fragment.
CC   The polypeptide is useful for screening for drugs targeting it by
CC   contacting the ALDH5A1 polymorphic variant with a candidate agent and
CC   assaying for binding activity. The polypeptide and haplotypes are useful
CC   for identifying an association between a trait such as a clinical
CC   response to a drug targeting ALDH5A1 and a haplotype ALDH5A1 gene.
CC   Transgenic animals are also useful for studying expression of the ALDH5A1
CC   isogenes in vivo, for in vivo screening and testing of drugs against
CC   ALDH5A1 protein and for testing the efficacy of therapeutic agents and
CC   compounds for 4-hydroxybutyric aciduria and metabolic diseases in a
CC   biological system. Antibodies are useful for diagnostic and prognostic
CC   formats and therapeutic methods, for immunoprecipitating the polypeptide
CC   from solution, for detecting ALDH5A1 protein isoforms in biological
CC   samples, frozen tissue sections, for use in immunocytochemical,
CC   immunohistochemical and immunofluorescence techniques. The polynucleotide
CC   is useful for gene therapy and antisense gene therapy. This sequence is
CC   an allele specific oligonucleotide (ASO) primer used to detect
CC   polymorphisms in the ALDH5A1 gene described in the method of the
CC   invention.
XX

SQ   Sequence 15 BP; 4 A; 6 C; 1 G; 3 T; 1 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1703 AAGTTGGGTTAGGAG 1717
              | |||||||||| ||
Db         15 AYGTTGGGTTAGCAG 1


RESULT 174
AAQ91451/c
ID   AAQ91451 standard; DNA; 16 BP.
XX
AC   AAQ91451;
XX
DT   25-MAR-2003  (updated)
DT   30-AUG-1995  (first entry)
XX
DE   Dysprosium (III) texaphyrin (DyTx) DNA conjugate.
XX
KW   Dysprosium (III) texaphyrin (DyTx) DNA conjugate; liver disease;
KW   targeted intracellular mRNA hydrolysis; gene expression inhibition;
KW   hormone regulation; hydrolysis reagents; alkyl phosphate esters;
KW   detoxification; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "DyTx-NH(CH2)6-PO4-thymine"
XX
PN   WO9429316-A2.
XX
PD   22-DEC-1994.
XX
PF   09-JUN-1994;   94WO-US06284.
XX
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Hemmi GW,  Iverson B,  Kral VA,  Magda D;
PI   Miller RA,  Mody T, Ross KL,  Sessler JL,  Smith DA;
PI   Wright M;
XX
DR   WPI; 1995-036382/05.
XX
PT   Texaphyrin metal complex mediated ester hydrolysis - esp. useful
PT   for targeted intracellular hydrolysis of mRNA and for inhibiting
PT   gene expression
XX
PS   Disclosure; Fig 21; 125pp; English.
XX
CC   AAQ91451-Q91457 are texaphyrin lanthanide metal DNA conjugates, which
CC   are esp. useful for the targeted intracellular hydrolysis of mRNA;
CC   inhibiting gene expression. They may also be used for the treament
CC   of liver disease, as hormone regulation agents and as hydrolysis
CC   reagents for the detoxification of alkyl phosphate esters.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 16 BP; 1 A; 2 C; 8 G; 5 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 16;
  Best Local Similarity   86.7%;  Pred. No. 2.5e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACA 1669
```

```
PS   Example 8; Page 86; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 3 A; 3 C; 7 G; 2 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGATTGGC 1736
              ||||||||| ||||
Db          1 GAGATGGAGCCTGGC 15


RESULT 171
AAF52891
ID   AAF52891 standard; DNA; 15 BP.
XX
AC   AAF52891;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #3851.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 86; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 3 A; 3 C; 6 G; 3 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1723 AGATGGAGATTGGCT 1737
              ||||||| |||||
Db          1 AGATGGAGCCTGGCT 15


RESULT 172
ABV99795
ID   ABV99795 standard; DNA; 15 BP.
XX
AC   ABV99795;
XX
DT   24-FEB-2003  (first entry)
XX
DE   Human PFKFB2 allele specific oligonucleotide primer #21.
XX
KW   Human; 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2; PFKFB2;
KW   cytostatic; antidiabetic; gene therapy; cancer; diabetes; ss;
KW   ASO; allele specific oligonucleotide; primer; polymorphism.
XX
OS   Homo sapiens.
XX
PN   WO200194363-A2.
XX
PD   13-DEC-2001.
XX
PF   07-JUN-2001; 2001WO-US18458.
XX
PR   07-JUN-2000; 2000US-209935P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Duda A,  Kazemi A,  Koshy B;
XX
DR   WPI; 2002-566434/60.
XX
PT   New 6-phosphofruoto-2-kinase/fructose-2,6-biphosphatase 2 (PFKFB2)
PT   gene variants, for improving efficiency and reliability in the
PT   development of drugs for treating diseases associated with PFKFB2
PT   activity e.g. cancer  -
XX
PS   Claim 16; Page 13; 95pp; English.
XX
CC   The invention relates to a novel human 6-phosphofructo-2-kinase/
CC   fructose-2,6-biphosphatase 2 (PFKFB2) isogene. The PFKFB2 of the
CC   invention has cytostatic and antidiabetic activity. The polynucleotides
CC   may have a use in gene therapy. The identified candidate agents targeting
CC   PFKFB2, are useful for treating cancer and diabetes. The methods of the
CC   invention are useful for improving the efficiency and reliability of
CC   several steps in the discovery and development of drugs for treating
CC   diseases associated with PFKFB2 activity. The present sequence represents
CC   a allele specific oligonucleotide (ASO) primer used in the invention to
CC   detect PFKFB2 gene polymorphisms.
XX
```

```
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 7; Page 48; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 3 A; 9 C; 1 G; 2 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1696 GTGGTGGAAGTTGGG 1710
              | ||||||| |||||
Db         15 GGGGTGGAACTTGGG 1

RESULT 169
AAF52889
ID   AAF52889 standard; DNA; 15 BP.
XX
AC   AAF52889;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #3849.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
PS   Example 8; Page 86; 201pp; English.
XX
CC   The present invention relates to a method for ameliorating the effects
CC   of skin disorders. The method comprises contacting the skin with an
CC   antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC   receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC   inhibiting or reducing growth factor mediated cell proliferation,
CC   inflammation and/or other disorders. The present sequence is an
CC   oligonucleotide which can be used to design the antisense
CC   oligonucleotides of the present invention (see AAF45151 and
CC   AAF45153-F45161). The method is useful for ameliorating the effects of
CC   psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC   keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC   skin, a hyperneovascular condition such as a neovascular condition of the
CC   retina, brain or skin, growth factor-mediated malignancies, other
CC   sclerotic disease, kidney disease, hyperproliferation of the inside of
CC   blood vessels or any other hyperplasia.
XX
SQ   Sequence 15 BP; 3 A; 2 C; 8 G; 2 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATTGG 1735
              ||||||||||  |||
Db          1 GGAGATGGAGCCTGG 15

RESULT 170
AAF52890
ID   AAF52890 standard; DNA; 15 BP.
XX
AC   AAF52890;
XX
DT   30-MAR-2001  (first entry)
XX
DE   IGF-I oligonucleotide #3850.
XX
KW   Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW   cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW   skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW   IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW   growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW   keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW   hyperneovascular condition; hyperplasia; kidney disease;
KW   neovascular condition of the retina; ss.
XX
OS   Homo sapiens.
XX
PN   WO200078341-A1.
XX
PD   28-DEC-2000.
XX
PF   21-JUN-2000; 2000WO-AU00693.
XX
PR   21-JUN-1999;   99US-0140345.
XX
PA   (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI   Wraight CJ,  Werther GA,  Edmondson SR;
XX
DR   WPI; 2001-041421/05.
XX
PT   Ameliorating the effects of a disorder, e.g. psoriasis, by
PT   administering UV (ultra-violet) treatment (optional) and an antisense
PT   nucleic acid that inhibits or reduces growth factor mediated cell
PT   proliferation and/or inflammation -
XX
```

XX
PD 02-JUN-2000.
XX
PF 07-OCT-1999; 99WO-JP05527.
XX
PR 26-NOV-1998; 98JP-0335151.
XX
PA (SHIO ) SHIONOGI & CO LTD.
XX
PI Moribe T, Kaneshige T;
XX
DR WPI; 2000-400097/34.
XX
PT Simple, rapid and accurate method for distinguishing HLA class I allele
PT type with possibility of mechanization and automation, applicable in
PT judging donor-recipient compatibility during organ transplant and
PT disease diagnosis -
XX
PS Claim 8; Page 56; 83pp; Japanese.
XX
CC The present invention describes a method for distinguishing a human
CC leukocyte antigen (HLA) class I antigen or allele by a combination
CC of polymerase chain reaction (PCR) using a primer pair whereby all
CC HLA-A, -B or -C alleles can be amplified or using reverse hybridisation
CC analysis comprising a DNA probe covalently bonded to microtitre plate
CC wells which are hybridisable specifically with the base sequence of at
CC least one specific HLA-A, -B or -C allele. The method is applicable in
CC gene typing, judging donor-recipient compatibility during organ
CC transplant and correlation analysis for diagnosis of various diseases.
CC The method is simple, rapid and accurate, with possibility of
CC mechanisation and automation, without the problems encountered by using
CC the prior-art techniques. AAA66943 to AAA67072 represent oligonucleotide
CC probes and PCR primers for use in the method of the present invention.
XX
SQ Sequence 15 BP; 4 A; 3 C; 6 G; 2 T; 0 other;

Query Match 8.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1734 GGCTCCCAACTCCTC 1748
||||| ||||| |||
Db 15 GGCTCTCAACTGCTC 1

RESULT 167
AAF47174/c
ID AAF47174 standard; DNA; 15 BP.
XX
AC AAF47174;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #594.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by
PT administering UV (ultra-violet) treatment (optional) and an antisense
PT nucleic acid that inhibits or reduces growth factor mediated cell
PT proliferation and/or inflammation -
XX
PS Example 7; Page 48; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects
CC of skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and
CC AAF45153-F45161). The method is useful for ameliorating the effects of
CC psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids,
CC keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the
CC skin, a hyperneovascular condition such as a neovascular condition of the
CC retina, brain or skin, growth factor-mediated malignancies, other
CC sclerotic disease, kidney disease, hyperproliferation of the inside of
CC blood vessels or any other hyperplasia.
XX
SQ Sequence 15 BP; 4 A; 7 C; 1 G; 3 T; 0 other;

Query Match 8.5%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 2.2e+02;
Matches 13; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1698 GGTGGAAGTTGGGTT 1712
||||||| ||||| |
Db 15 GGTGGAACTTGGGAT 1

RESULT 168
AAF47176/c
ID AAF47176 standard; DNA; 15 BP.
XX
AC AAF47176;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGFBP3 oligonucleotide #596.
XX
KW Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU00693.
XX
PR 21-JUN-1999; 99US-0140345.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;

```
FT                   /mod_base=
FT                   /note= "DyTxNH-(CH2)6-PSO3-cytosine, where DyTx is
FT                          dysprosium (III) texaphyrin"
XX
PN   US5763172-A.
XX
PD   09-JUN-1998.
XX
PF   07-JUN-1995;   95US-0486962.
XX
PR   07-JUN-1995;   95US-0485581.
PR   21-JAN-1992;   92US-0822964.
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
PR   09-JUN-1994;   94WO-US06284.
PR   26-MAY-1995;   95US-0452261.
PR   07-JUN-1995;   95US-0486962.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Magda D,  Miller RA,  Sessler JL,  Wright M;
XX
DR   WPI; 1998-347306/30.
XX
PT   Enhancing therapeutic activity of oligonucleotides in cells - using
PT   conjugate comprising metallotexaphyrin, which hydrolyses phosphate
PT   ester bonds of RNA, and oligo-nucleotide, which binds to targetted
PT   RNA
XX
PS   Example 8; Columns 29-30; 34pp; English.
XX
CC   The invention relates to a method of enhancing the therapeutic activity
CC   of oligonucleotides in cells. It comprises contacting a targeted
CC   intracellular RNA in a cell with a metallotexaphyrin-oligonucleotide
CC   conjugate. The contact is carried out under physiological conditions for
CC   a time sufficient to hydrolyse the phosphate ester bond of the targeted
CC   RNA. The metallotexaphyrin of the conjugate has catalytic activity for
CC   phosphate ester bond hydrolysis. The oligonucleotide of the conjugate
CC   has complementary binding affinity to the targeted RNA. The conjugate
CC   may be used in antisense therapies for treating, e.g. cancer, viral
CC   infections, autoimmune diseases and restenosis. The conjugate may also
CC   be used as hydrolysis reagents for the detoxification of di- and
CC   trialkyl phosphate esters, which are used in solvents, insecticides and
CC   chemical nerve gases. The metallotexaphyrin complex enhances the
CC   therapeutic activity of the oligonucleotide, not only by facilitating
CC   cellular uptake of the oligonucleotide but also by hydrolysing target
CC   RNA within the cell, independent of RNase H. Attachment to the complex
CC   may also cause the oligonucleotide to take on some of the pharmacodynamic
CC   an biodistribution properties of the texaphyrin, such as selective
CC   localisation in tumours. The present sequence represents a metallo-
CC   texaphyrin-oligonucleotide conjugate.
XX
SQ   Sequence 15 BP; 2 A; 4 C; 6 G; 3 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1659 CCAGGCTCACAGCTG 1673
              || |||||||||  ||
Db         15 CCCGGCTCACAGATG 1


RESULT 165
AAX55348/c
ID   AAX55348 standard; DNA; 15 BP.
XX
AC   AAX55348;
XX
DT   08-JUL-1999  (first entry)
XX
DE   Soluble sc-TCR fusion protein constructing primer KC155.
XX
KW   Fusion protein; soluble; immunoglobulin; Ig; sc-TCR; immune response;
KW   single-chain T-cell receptor; T cell activation; therapy; PCR primer; ss.
XX
OS   Synthetic.
XX
PN   WO9918129-A1.
XX
PD   15-APR-1999.
XX
PF   28-SEP-1998;   98WO-US20263.
XX
PR   02-OCT-1997;   97US-0943086.
XX
PA   (SUNO-) SUNOL MOLECULAR CORP.
XX
PI   Card KF,  Weidanz JA,  Wong HC;
XX
DR   WPI; 1999-264000/22.
XX
PT   Soluble single-chain T cell receptor proteins
XX
PS   Examples; Fig 6D; 145pp; English.
XX
CC   The invention relates to a soluble fusion protein that comprises an
CC   immunoglobulin (Ig) light chain constant region or fragment, covalently
CC   linked to a single-chain T-cell receptor (sc-TCR) comprising a V-alpha
CC   chain covalently linked to a V-beta chain by a peptide linker sequence.
CC   The soluble fusion protein can induce an immune response in a mammal, so
CC   that the mammal is immunized against pathogenic T cell receptor
CC   epitopes. It can also be used to inhibit T-cell activation in a mammal.
CC   The sc-TCR can be used to kill a cell containing a TCR specific ligand.
CC   The sc-TCR proteins can be used in vitro to detect and analyse ligands
CC   such as peptides and MHC/HLA molecular components of TCR ligands. They
CC   can also be used to detect T-cells with pathogenic properties. Other uses
CC   include functional, cellular and molecular assays and structural
CC   analysis. In vivo the sc-TCRs can compete with pathogenic T cells or to
CC   raise antibodies for use in therapy. Fusion of an Ig light chain
CC   constant region to a sc-TCR facilitates soluble expression. The sc-TCR
CC   can be isolated in significant quantities without performing difficult
CC   solubilisation, cleaving or re-folding steps. The fusion also confers a
CC   means of detecting and purifying the fusion proteins by conventional
CC   immunological methods. Sequences AAX55301 to AAX55445 represent PCR
CC   primers used for constructing the fusion proteins of the invention.
XX
SQ   Sequence 15 BP; 1 A; 3 C; 5 G; 6 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1656 GCACCAGGCTCACAG 1670
              | |||||  |||||||
Db         15 GAACCAGACTCACAG 1


RESULT 166
AAA66971/c
ID   AAA66971 standard; DNA; 15 BP.
XX
AC   AAA66971;
XX
DT   19-OCT-2000  (first entry)
XX
DE   Human leukocyte antigen A allele DNA probe A539T SEQ ID NO:29.
XX
KW   Human leukocyte antigen; HLA; class I allele type; probe; PCR primer;
KW   amplification; hybridisation; organ transplant; gene typing;
KW   diagnosis; ss.
XX
OS   Homo sapiens.
XX
PN   WO200031295-A1.
```

```
OS   Synthetic.
OS   Human immunodeficiency virus type 1.
XX
PN   WO9727332-A1.
XX
PD   31-JUL-1997.
XX
PF   17-JAN-1997;   97WO-EP00211.
XX
PR   25-JUN-1996;   96EP-0870081.
PR   26-JAN-1996;   96EP-0870005.
XX
PA   (INNO-) INNOGENETICS NV.
XX
PI   Louwagie J,  Rossau R,  Stuyver L;
XX
DR   WPI; 1997-393716/36.
XX
PT   Determining susceptibility to antiviral drugs of reverse
PT   transcriptase containing viruses - useful for genotyping HIV RT and
PT   detecting antiviral resistant HIV
XX
PS   Claim 13; Page 36; 59pp; English.
XX
CC   This sequence represents a probe for a wild type HIV reverse
CC   transcriptase (RT) gene fragment. This sequence can be used in the method
CC   of the invention for determining the susceptibility to antiviral drugs of
CC   viruses which contain RT genes and are present in a biological sample. It
CC   comprises: (1) releasing, isolating or concentrating the polynucleic
CC   acids present in a sample; (2) amplifying the relevant part of the RT
CC   genes present with at least one suitable primer pair; (3) hybridising the
CC   polynucleic acids of step (1) or (2) with at least two RT gene probes,
CC   the probes being applied to known locations on a solid support, and are
CC   capable of simultaneously hybridising to their respective target regions
CC   under appropriate hybridisation and wash condition allowing the detection
CC   of homologous targets, or with the probes hybridising specifically with a
CC   sequence complementary to any of the target sequences; (4) detecting the
CC   hybrids formed in step (3); and (4) inferring the nucleotide sequence at
CC   the codons of interest (codons 38-44, 47-53, 65-72, 73-77, 148-154,
CC   180-187, 212-216, and 217-220), and/or the amino acids of the codons of
CC   interest and/or antiviral drug resistance spectrum, and possible the type
CC   of viral isolates involved from the differential hybridisation signals
CC   obtained in step (4). The method is specifically used to detect antiviral
CC   drug resistant strains of viruses containing RT genes, especially HIV
CC   retroviruses and Hepadnaviridae. The method can also be used for
CC   genotyping HIV RT.
XX
SQ   Sequence 15 BP; 7 A; 1 C; 5 G; 2 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1717 GTACGGAGATGGAGA 1731
              |||| |||||||| |
Db          1 GTACAGAGATGGAAA 15


RESULT 163
AAV54266/c
ID   AAV54266 standard; cDNA; 15 BP.
XX
AC   AAV54266;
XX
DT   29-DEC-1998  (first entry)
XX
DE   Primer KC155 used in the method of the invention.
XX
KW   PCR; primer; amplification; single chain T-cell receptor; scTCR; Vbc;
KW   bacteriophage coat protein; BCP; V-alpha chain; Vac; V-beta chain;
KW   immune response; T-cell receptor; TCR; cancer; allergy;
KW   T lymphocyte; ss.
XX
OS   Synthetic.
XX
PN   WO9839482-A1.
XX
PD   11-SEP-1998.
XX
PF   05-MAR-1998;   98WO-US04274.
XX
PR   07-MAR-1997;   97US-0813781.
XX
PA   (SUNO-) SUNOL MOLECULAR CORP.
XX
PI   Card KF,  Weidanz JA,  Wong HC;
XX
DR   WPI; 1998-506374/43.
XX
PT   New soluble T cell receptor fusion proteins - comprise V-alpha
PT   chain, peptide linker, V-beta chain and bacteriophage coat protein,
PT   used to, e.g. develop products for modulating immune responses
XX
PS   Disclosure; Fig 21D; 150pp; English.
XX
CC   The present primer was used to construct DNA vectors which were
CC   used in the method of the invention.  The invention provides single
CC   chain T-cell receptor (scTCR) fusion proteins which comprise of a
CC   bacteriophage coat protein (BCP; e.g. gene III or VIII product)
CC   covalently linked to a scTCR comprising of a V-alpha chain (Vac)
CC   covalently linked to a V-beta chain (Vbc) by a peptide linker
CC   sequence.  The BCP increases solubility of the scTCR fusion proteins,
CC   thereby enhancing yield and functionality.  The scTCR fusion proteins
CC   are fully soluble and functional, and can be isolated in significant
CC   quantities without performing difficult solubilisation, cleaving or
CC   re-folding steps.  The scTCR fusion proteins can be produced in a
CC   variety of formats including bacteriophage display libraries to screen
CC   for binding molecules which specifically bind the scTCR fusion
CC   proteins.  The scTCRs are claimed to be useful for reducing an immune
CC   response by competing with an antigen with T-cell receptors (TCR)
CC   occurring on pathogenic T cells such as those accompanying cancer,
CC   infectious disease, allergy, etc.  The scTCRs are also claimed to be
CC   useful for inducing an immune response for immunisation against TCR
CC   structures to reduce or eliminate the pathogenic or undesirable effects
CC   of T cells, and they can also be used for the production of antibodies
CC   and in diagnostic applications.
XX
SQ   Sequence 15 BP; 1 A; 3 C; 5 G; 6 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1656 GCACCAGGCTCACAG 1670
              | ||||| |||||||
Db         15 GAACCAGACTCACAG 1


RESULT 164
AAV07304/c
ID   AAV07304 standard; DNA; 15 BP.
XX
AC   AAV07304;
XX
DT   14-AUG-1998  (first entry)
XX
DE   Metallotexaphyrin-oligonucleotide conjugate #18.
XX
KW   Metallotexapyrin; dysprosium; europium; conjugate; RNase H;
KW   antisense therapy; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1
FT                    /*tag=  a
```

```
FT                   /mod_base=
FT                   /note= "cytosine is modified by lutetium(III)texaphyrin
FT                         compound"
FT   misc_binding    1..15
FT                   /*tag=  b
FT                   /note= "this region binds to AAT89134"
FT   misc_feature    15
FT                   /*tag=  c
FT                   /note= "Guanine is modified by a methoxy group"
XX
PN   WO9609315-A1.
XX
PD   28-MAR-1996.
XX
PF   21-SEP-1995;   95WO-US12312.
XX
PR   06-JUN-1995;   95US-0469177.
PR   21-SEP-1994;   94US-0310501.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Hemmi GW,  Iverson BL,  Magda D,  Mody TD,  Sansom PI;
PI   Sessler JL,  Wright M;
XX
DR   WPI; 1996-200644/20.
XX
PT   Use of photosensitive texaphyrin compounds - for light-induced cleavage
PT   of polymers of deoxyribonucleic acid in analyses or therapy
XX
PS   Example 8; Figure 3; 81pp; English.
XX
CC   The present sequence represents RNA coupled to a photosensitive
CC   texaphyrin molecule, which was used in a new method for photocleavage of
CC   DNA. Targeted intracellular light-induced cleavage of a selected DNA
CC   comprises introducing into a cell a photosensitive texaphyrin (PT)
CC   coupled to an oligonucleotide which is complementary to the selected DNA
CC   and exposing the cell to light to cleave the DNA. Modulating the activity
CC   of a selected DNA comprises contacting the DNA with a PT coupled to an
CC   oligonucleotide which binds to the DNA and exposing the DNA-PT mixture
CC   to light to cleave the DNA. These methods can be used e.g. in cleavage of
CC   DNA in footprinting analysis, DNA sequencing, chromosome analyses, gene
CC   isolation, recombinant DNA manipulations, mapping of large genomes and
CC   chromosomes and for site-directed mutagenesis. They can also be used in
CC   anti-viral therapy and for the treatment of cancers, inflammatory
CC   responses that are caused by over expression of certain proteins,
CC   infectious diseases and genetically-based disorders.
XX
SQ   Sequence 15 BP; 2 A; 4 C; 6 G; 3 U; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1659 CCAGGCTCACAGCTG 1673
              || ||||||||| ||
Db         15 CCCGGCTCACAGATG 1


RESULT 161
AAT65005/c
ID   AAT65005 standard; DNA; 15 BP.
XX
AC   AAT65005;
XX
DT   25-MAR-2003  (updated)
DT   28-MAY-1997  (first entry)
XX
DE   Human chromosome 6 region q27 VNTR consensus repeat sequence.
XX
KW   Variable number of tandem repeat; VNTR; genetic marker; satellite;
KW   polymorphism; cCI6-111; probe; DNA fingerprinting; paternity;
KW   forensic; diagnosis; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   repeat_unit     1..15
FT                   /*tag=  b
FT                   /rpt_type= TANDEM
FT                   /note= "repeat units are 16 nucleotides long in the
FT                          VNTR region; the last nucleotide (not
FT                          included in this consensus sequence) can be
FT                          either T or C"
XX
PN   JP08224100-A.
XX
PD   03-SEP-1996.
XX
PF   27-DEC-1991;   95JP-0337988.
XX
PR   27-DEC-1991;   91JP-0359482.
PR   27-DEC-1991;   91JP-0337988.
XX
PA   (GANK-) ZH GAN KENKYUKAI.
XX
DR   WPI; 1996-449912/45.
XX
PT   Human variable number of tandem repeat sequence - from chromosome 6
PT   q27 region, has restriction fragment length polymorphism with MspI,
PT   RsaI, TaqI, BglII, PstI and PvuII and is useful for genetic
PT   fingerprinting
XX
PS   Claim 1; Fig 2; 5pp; Japanese.
XX
CC   The present sequence is a consensus repeat corresponding to
CC   nucleotides 1-15 of the degenerate sequence RWGGRRRTGGGGRCCY which
CC   is repeated in the variable number of tandem repeat (VNTR) sequence
CC   located at the q27 position in human chromosome 6. The VNTR has a
CC   restriction fragment length polymorphism (RFLP) with Msp I, Rsa I,
CC   Taq I, Bgl II, Pst I and Pvu II, i.e. it has at least 9 alleles
CC   between 4.4 kb and 1.8 kb with respect to Msp I, at least 11 alleles
CC   between 5.5 kb and 1.7 kb with respect to Rsa I, at least 12 alleles
CC   between 8.5 kb and 2.6 kb with respect to Taq I, at least 12 alleles
CC   between 10 kb and 2.1 kb with respect to Bgl II, at least 11 alleles
CC   between 5.2 kb and 0.5 kb with respect to Pst I, and at least 10
CC   alleles between 10 kb and 2.3 kb with respect to Pvu II. The VNTR
CC   sequence can be used as a probe to identify an individual, e.g. in
CC   paternity or forensic analysis.
CC   (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 15 BP; 2 A; 2 C; 10 G; 1 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1734 GGCTCCCAACTCCTC 1748
              ||| |||| ||||||
Db         15 GGCCCCCACCTCCTC 1


RESULT 162
AAT98897
ID   AAT98897 standard; DNA; 15 BP.
XX
AC   AAT98897;
XX
DT   23-MAR-1998  (first entry)
XX
DE   Probe 41w19 for HIV RT gene wild type E40M41K43.
XX
KW   Reverse transcriptase gene; HIV; RT gene; antiviral drug susceptibility;
KW   virus susceptibility; antiviral drug resistant viral strain; retrovirus;
KW   Hepadnaviridae; HIV RT genotyping; probe; ss.
XX
```

```
                    ||||||||||||
Db          2 GCAGAAGGCAAG 13


RESULT 158
ABV90237
ID   ABV90237 standard; DNA; 17 BP.
XX
AC   ABV90237;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 950.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 950; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 7 G; 2 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAG 1656
                ||||||||||||
Db          1 GCAGAAGGCAAG 12


RESULT 159
AAQ50548/c
ID   AAQ50548 standard; DNA; 15 BP.
XX
AC   AAQ50548;
XX
DT   24-MAY-1994  (first entry)
XX
DE   Human chromosome 6 cCI6-111 VNTR consensus sequence.
XX
KW   Variable Number of Tandem Repeats; human VNTR; satellite sequence;
KW   DNA fingerprint; Southern hybridisation; probe; ss.
XX
OS   Homo sapiens.
XX
PN   JP05276949-A.
XX
PD   26-OCT-1993.
XX
PF   27-DEC-1991;   91JP-0359482.
XX
PR   27-DEC-1991;   91JP-0359482.
XX
PA   (GANK-) ZH GAN KENKYUKAI.
XX
DR   WPI; 1993-373584/47.
XX
PT   Human VNTR sequence - used to discriminate individual, esp.
PT   parent and child
XX
PS   Disclosure; Fig 12; 11pp; Japanese.
XX
CC   The degenerate probe sequence AAQ50544 corresponds to VNTRs found
CC   in human chromosome 6. See AAQ61882-3 for the repeat region sequence
CC   and AAQ50548 for the consensus sequence.
XX
SQ   Sequence 15 BP; 2 A; 2 C; 10 G; 1 T; 0 other;

  Query Match             8.5%;  Score 11.8;  DB 1;  Length 15;
  Best Local Similarity   86.7%;  Pred. No. 2.2e+02;
  Matches   13;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1734 GGCTCCCAACTCCTC 1748
                ||| |||| ||||||
Db         15 GGCCCCCACCTCCTC 1


RESULT 160
AAT89133/c
ID   AAT89133 standard; RNA; 15 BP.
XX
AC   AAT89133;
XX
DT   04-MAR-1998  (first entry)
XX
DE   Lutetium texaphyrin RNA congugate for light induced cleavage of DNA.
XX
KW   Photosensitive; texaphyrin; DNA cleavage; light induced; photocleavage;
KW   lutetium; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1
FT                   /*tag=  a
```

```
AC   ABV90235;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 948.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 948; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 7 G; 2 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAG 1656
             ||||||||||||
Db          3 GCAGAAGGCAAG 14
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RESULT 157
ABV90236
ID   ABV90236 standard; DNA; 17 BP.
XX
AC   ABV90236;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 949.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 949; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 6 A; 2 C; 7 G; 2 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAG 1656
```

```
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 946; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 5 A; 3 C; 7 G; 2 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAG 1656
              ||||||||||||
Db          5 GCAGAAGGCAAG 16


RESULT 155
ABV90234
ID   ABV90234 standard; DNA; 17 BP.
XX
AC   ABV90234;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 947.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 947; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAG 1656
              ||||||||||||
Db          4 GCAGAAGGCAAG 15


RESULT 156
ABV90235
ID   ABV90235 standard; DNA; 17 BP.
XX
```

```
RESULT 152
AAF02799/c
ID   AAF02799 standard; DNA; 17 BP.
XX
AC   AAF02799;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1094.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 80; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1651 GGCAAGCACCAG 1662
              ||||||||||||
Db         12 GGCAAGCACCAG 1

RESULT 153
ABV90232
ID   ABV90232 standard; DNA; 17 BP.
XX
AC   ABV90232;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 945.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 945; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 17;
  Best Local Similarity   100.0%;  Pred. No. 2.5e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAG 1656
              ||||||||||||
Db          6 GCAGAAGGCAAG 17

RESULT 154
ABV90233
ID   ABV90233 standard; DNA; 17 BP.
XX
AC   ABV90233;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 946.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
```

```
Qy       1649 AAGGCAAGCACCAG 1662
              :||||||||| |||
Db         14 RAGGCAAGCAGCAG 1

RESULT 150
AAS98750
ID   AAS98750 standard; DNA; 15 BP.
XX
AC   AAS98750;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Colony stimulating factor 1 receptor (CSF1R) oligonucleotide #116.
XX
KW   Colony stimulating factor 1 receptor; CSF1R; polymorphic variant;
KW   cytostatic; gene therapy; malignant histiocytosis; isogene;
KW   myeloid malignancy; inflammatory disorder; transgenic animal;
KW   haplotype; genotype; human; allele specific oligonucleotide; ASO;
KW   primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200179225-A2.
XX
PD   25-OCT-2001.
XX
PF   12-APR-2001; 2001WO-US12044.
XX
PR   12-APR-2000; 2000US-196411P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Chew A,  Choi JY,  Koshy B;
XX
DR   WPI; 2002-075058/10.
XX
PT   Novel polymorphic variants of colony stimulating factor 1 receptor
PT   useful in studying expression and function of the protein, useful for
PT   screening candidate drugs to treat diseases e.g. inflammatory disorders
PT   -
XX
PS   Claim 15; Page 16; 164pp; English.
XX
CC   The invention describes a novel isolated polynucleotide (I) comprising a
CC   sequence which is a polymorphic variant (PV) of a reference sequence for
CC   colony stimulating factor 1 receptor (CSF1R) gene, found on The
CC   polypeptide are useful for improving the discovery and development of
CC   drugs for treating diseases associated with CSF1R activity, e.g.,
CC   malignant histiocytosis, myeloid malignancies, and inflammatory disorders
CC   and the haplotypes can be used to validate CSF1R as a candidate target
CC   for treating a specific condition or disease predicted to be associated
CC   with CSF1R activity. Genotyping the CSF1R gene of an individual can also
CC   be used in developing diagnostic tests and therapeutic treatments. (I) is
CC   useful in studying the expression and function of CSF1R, and in
CC   expressing CSF1R protein for use in screening for candidate drugs to
CC   treat diseases related to CSF1R activity and in studying the effect of
CC   the variation on the biological activity of CSF1R as well as on the
CC   binding affinity of candidate drugs targeting CSF1R. Antibodies are
CC   useful in a variety of diagnostic and prognostic formats and therapeutic
CC   methods. A transgenic animal is useful in studying expression of the
CC   CSF1R isogenes in vivo, for in vivo screening and testing of drugs
CC   targeted against CSF1R protein, and for testing the efficacy of
CC   therapeutic agents and compounds. Allele specific oligonucleotides (ASO)
CC   are useful as probes and primers, and for assaying a polymorphism in the
CC   target region. Without requiring any a priori knowledge of the phenotypic
CC   effect of any particular CSF1R or haplotype the invention provides a
CC   method for identifying lead compounds that are more likely to show
CC   efficacy in clinical trials. This sequence is an allele specific
CC   oligonucleotide primer used for detecting CSF1R gene polymorphisms,
CC   described in the method of the invention.
XX
SQ   Sequence 15 BP; 2 A; 3 C; 6 G; 3 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1726 TGGAGATTGGCTCC 1739
              |||||| |||||:|
Db          2 TGGAGAGTGGCTYC 15


RESULT 151
AAL44022
ID   AAL44022 standard; DNA; 16 BP.
XX
AC   AAL44022;
XX
DT   27-SEP-2002  (first entry)
XX
DE   Human cytochrome P4502A6 (CYP4502A6 or CYP2A6) gene sequencing primer 3.
XX
KW   Human; PCR; sequencing; primer; ss; single nucleotide polymorphism; SNP;
KW   cytochrome; P4502A6; CYP4502A6; CYP2A6; chromosome 19;
KW   steroid metabolism; drug detoxification; xenobiotic detoxification;
KW   procarcinogen activation; inflammation; asthma; habitual smoking.
XX
OS   Homo sapiens.
XX
PN   WO200194633-A1.
XX
PD   13-DEC-2001.
XX
PF   01-JUN-2001; 2001WO-US17781.
XX
PR   02-JUN-2000; 2000US-0586376.
XX
PA   (DNAS-) DNA SCI INC.
XX
PI   Guida M,  Hall J;
XX
DR   WPI; 2002-566448/60.
XX
PT   New isolated polynucleotide, useful to screen individuals for asthma,
PT   inflammation and susceptibility to habitual smoking, comprises base
PT   variation from that of known human cytochrome P4502A6 sequence  -
XX
PS   Example 1; Page 26; 48pp; English.
XX
CC   The invention comprises the identification of genetic polymorphisms in
CC   the human cytochrome P4502A6 (CYP4502A6 or CYP2A6) gene. The human
CC   cytochrome P4502A6 gene is located on chromosome 19 and encodes an enzyme
CC   that plays a role in the metabolism of steroids, the detoxification of
CC   drugs and xenobiotics, and the activation of procarcinogens. The P4502A6
CC   polymorphisms identified in the invention are useful for evaluating an
CC   individual's risk of developing asthma or an individual's propensity for
CC   cigarette consumption. The P4502A6 DNA sequences of the invention are
CC   useful for identifying individuals having a polymorphic genotype and to
CC   screen individuals for altered metabolism for cytochrome P4502A6
CC   substrates. The P4502A6 DNA sequences of the invention are also useful
CC   for identifying individuals who are at risk from inflammation, asthma,
CC   habitual smoking and diseases that result from environmental or
CC   occupational exposures to dangerous substances. The present DNA sequence
CC   represents a human cytochrome P4502A6 sequencing primer.
XX
SQ   Sequence 16 BP; 1 A; 1 C; 8 G; 6 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 16;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1634 TGGGGCTTGTAG 1645
              ||||||||||||
Db          1 TGGGGCTTGTAG 12
```

```
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 5 A; 6 C; 0 G; 2 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1705 GTTGGGTTAGGA 1716
              ||||||||||||
Db         12 GTTGGGTTAGGA 1


RESULT 148
ABL52231
ID   ABL52231 standard; DNA; 15 BP.
XX
AC   ABL52231;
XX
DT   15-JUL-2002  (first entry)
XX
DE   Human PHKG2 allele specific oligonucleotide primer SEQ ID NO:18.
XX
KW   Human; phosphorylase kinase gamma 2 (testis); PHKG2; enzyme; SNP;
KW   phosphorylase kinase gamma 2; single nucleotide polymorphism;
KW   polymorphic; hepatotropic; gene therapy; glycogen storage disease;
KW   liver cirrhosis; allele specific oligonucleotide; ASO; primer; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    14
FT                   /*tag=  a
FT                   /note= "polymorphic site indicated by an ambiguity base"
XX
PN   WO200194365-A2.
XX
PD   13-DEC-2001.
XX
PF   11-JUN-2001; 2001WO-US18814.
XX
PR   09-JUN-2000; 2000US-210568P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Choi JY,  Koshy B,  Sanchis A,  Sausker EA;
XX
DR   WPI; 2002-401587/43.
XX
PT   New variants of phosphorylase kinase gamma 2 isogenes, useful for
PT   improving efficiency and reliability in the development of drugs for
PT   treating diseases e.g. liver cirrhosis  -
XX
PS   Claim 16; Page 13; 76pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I) comprising
CC   a nucleotide sequence which is a polymorphic variant of a reference
CC   sequence for human phosphorylase kinase gamma2 (testis) (PHKG2) gene or
CC   its fragment, or a polymorphic variant of a reference sequence for a
CC   PHKG2 cDNA or its fragment. Also described is an isolated polypeptide
CC   (II) comprising an amino acid sequence which is a polymorphic variant of
CC   a reference sequence for PHKG2 protein or its fragment, where the
CC   reference sequence comprises a sequence (see ABB09290) of 406 amino
CC   acids, and the polymorphic variant comprises one or more variant amino
CC   acids selected from glutamic acid at a position corresponding to amino
CC   acid position 153 and tryptophan at position corresponding to amino acid
CC   position 329. (I) has hepatotropic activity and can be used in gene
CC   therapy. (II) is useful in screening for drugs targeting (II), by
CC   contacting a PHKG2 polymorphic variant with a candidate agent and
CC   assaying for binding activity. The identified candidate agents targeting
CC   PHKG2, are useful for treating liver cirrhosis and glycogen storage
CC   diseases. The present sequence represents an allele specific
CC   oligonucleotide (ASO) primer for the PHKG2 gene, which is used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 15 BP; 1 A; 10 C; 0 G; 3 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTCC 1749
              |||||| |||||:|
Db          2 CTCCCACCTCCTSC 15


RESULT 149
AAD26061/c
ID   AAD26061 standard; DNA; 15 BP.
XX
AC   AAD26061;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Human apolipoprotein E (APOE) gene polymorphism detecting ASO primer #12.
XX
KW   Human; antilipaemic; neuroprotective; nootropic; genetic variant; APOE;
KW   apolipoprotein E; haplotyping; familial dysbetalipoproteinaemia; therapy;
KW   genotyping; type III hyperlipoproteinaemia; Alzheimer's disease;
KW   atherosclerosis; polymorphism; allele specific oligonucleotide;
KW   ASO primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200179234-A2.
XX
PD   25-OCT-2001.
XX
PF   16-APR-2001; 2001WO-US12303.
XX
PR   14-APR-2000; 2000US-197188P.
XX
PA   (GENA-) GENAISSANCE PHARM INC.
XX
PI   Choi JY,  Kliem SE,  Koshy B,  Lee HH;
XX
DR   WPI; 2002-075064/10.
XX
PT   Genotyping human apolipoprotein gene of individual for determining
PT   haplotype of individual, involves determining identity of nucleotide
PT   pair at specific polymorphic sites for two copies of gene -
XX
PS   Claim 16; Page 14; 78pp; English.
XX
CC   The patent discloses novel genetic variants of human apolipoprotein
CC   E (APOE) gene. The invention also relates to compositions and methods
CC   for haplotyping and/or genotyping the APOE gene. The haplotyping
CC   methods of the invention are useful for improving the efficacy and
CC   reliability of several steps in the discovery and development of
CC   drugs for treating diseases associated with APOE activity, e.g.
CC   familial dysbetalipoproteinaemia, type III hyperlipoproteinaemia,
CC   atherosclerosis, and Alzheimer's disease. They are useful to validate
CC   APOE as a candidate agent for treating a specific condition or disease
CC   predicted to be associated with APOE activity and in the design of
CC   clinical trials of candidate drugs for treating a specific condition
CC   or disease predicted to be associated with APOE activity. Genotyping
CC   or haplotyping methods are useful to screen for compounds targeting
CC   APOE to treat a specific condition or disease associated with APOE
CC   activity. The present DNA sequence is an allele specific oligonucleotide
CC   (ASO) primer which is used for detecting human APOE gene polymorphisms.
XX
SQ   Sequence 15 BP; 1 A; 5 C; 3 G; 5 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 15;
  Best Local Similarity   85.7%;  Pred. No. 2e+02;
  Matches   12;  Conservative    1;  Mismatches    1;  Indels    0;  Gaps    0;
```

```
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 200366; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 7 C; 0 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGAT 1732
              ||||||||||||
Db         13 GGAGATGGAGAT 2


RESULT 146
ABH47624
ID   ABH47624 standard; DNA; 13 BP.
XX
AC   ABH47624;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 247601 for detecting SNP TSC0060506.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 247601; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 6 G; 5 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1705 GTTGGGTTAGGA 1716
              ||||||||||||
Db          2 GTTGGGTTAGGA 13


RESULT 147
ABH47625/c
ID   ABH47625 standard; DNA; 13 BP.
XX
AC   ABH47625;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 247602 for detecting SNP TSC0060506.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 247602; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
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```
Qy       1702 GAAGTTGGGTTA 1713
              ||||||||||||
Db          1 GAAGTTGGGTTA 12


RESULT 143
ABF95705/c
ID   ABF95705 standard; DNA; 13 BP.
XX
AC   ABF95705;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 195702 for detecting SNP TSC0009428.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 195702; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1702 GAAGTTGGGTTA 1713
              ||||||||||||
Db         13 GAAGTTGGGTTA 2


RESULT 144
ABH00388
ID   ABH00388 standard; DNA; 13 BP.
XX
AC   ABH00388;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 200365 for detecting SNP TSC0049306.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 200365; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 7 G; 2 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGAT 1732
              ||||||||||||
Db          1 GGAGATGGAGAT 12


RESULT 145
ABH00389/c
ID   ABH00389 standard; DNA; 13 BP.
XX
AC   ABH00389;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 200366 for detecting SNP TSC0049306.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
```

```
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 124341; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1723 AGATGGAGATTG 1734
             ||||||||||||
Db          1 AGATGGAGATTG 12


RESULT 141
ABF24345/c
ID   ABF24345 standard; DNA; 13 BP.
XX
AC   ABF24345;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 124342 for detecting SNP TSC0031088.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 124342; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 5 C; 0 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1723 AGATGGAGATTG 1734
             ||||||||||||
Db         13 AGATGGAGATTG 2


RESULT 142
ABF95704
ID   ABF95704 standard; DNA; 13 BP.
XX
AC   ABF95704;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 195701 for detecting SNP TSC0009428.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 195701; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
XX
AC   ABC84320;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 84337 for detecting SNP TSC0021205.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 84337; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 5 G; 3 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGATT 1733
             ||||||||||||
Db          1 GAGATGGAGATT 12


RESULT 139
ABC84321/c
ID   ABC84321 standard; DNA; 13 BP.
XX
AC   ABC84321;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 84338 for detecting SNP TSC0021205.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 84338; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 5 C; 0 G; 4 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1722 GAGATGGAGATT 1733
             ||||||||||||
Db          13 GAGATGGAGATT 2


RESULT 140
ABF24344
ID   ABF24344 standard; DNA; 13 BP.
XX
AC   ABF24344;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 124341 for detecting SNP TSC0031088.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
```

```
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 6 C; 0 G; 5 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGAT 1732
              ||||||||||||
Db         12 GGAGATGGAGAT 1


RESULT 136
ABC63272
ID   ABC63272 standard; DNA; 13 BP.
XX
AC   ABC63272;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 63289 for detecting SNP TSC0016721.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 63289; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 0 C; 6 G; 4 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1697 TGGTGGAAGTTG 1708
              ||||||||||||
Db          1 TGGTGGAAGTTG 12


RESULT 137
ABC63273/c
ID   ABC63273 standard; DNA; 13 BP.
XX
AC   ABC63273;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 63290 for detecting SNP TSC0016721.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 63290; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 0 G; 2 T; 1 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1697 TGGTGGAAGTTG 1708
              ||||||||||||
Db         13 TGGTGGAAGTTG 2


RESULT 138
ABC84320
ID   ABC84320 standard; DNA; 13 BP.
```

KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 312150; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 12 BP; 4 A; 0 C; 5 G; 3 T; 0 other;

```
  Query Match             8.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1747 TCCCTATCCTAA 1758
              ||||||||||||
Db         12 TCCCTATCCTAA 1
```

RESULT 134
ABC05018
ID ABC05018 standard; DNA; 13 BP.
XX
AC ABC05018;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 5009 for detecting SNP TSC0001740.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 5009; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic
CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC and cytosine methylation status in chemically pretreated genomic DNA. The
CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC range of diseases including immune system, gastrointestinal, respiratory,
CC central nervous system, cardiovascular and metabolic disorders. The
CC oligomers are also used for detecting cell type differentiation.
CC ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC ABI00010-ABI82073 represent the oligomers described in the invention.
CC NOTE: The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 13 BP; 5 A; 0 C; 6 G; 2 T; 0 other;

```
  Query Match             8.6%;  Score 12;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1.6e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGAT 1732
              ||||||||||||
Db          2 GGAGATGGAGAT 13
```

RESULT 135
ABC05019/c
ID ABC05019 standard; DNA; 13 BP.
XX
AC ABC05019;
XX
DT 20-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 5010 for detecting SNP TSC0001740.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 5010; 29pp + Sequence Listing; German.
XX
CC This invention describes novel oligonucleotide primers or peptide nucleic

```
CC   treatment of arteriosclerosis. Sequences AAI66655-91 represent PCR
CC   primers related to the human CETP DNA, used during the course of the
CC   invention.
XX
SQ   Sequence 21 BP; 5 A; 6 C; 6 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 21;
  Best Local Similarity   82.4%;  Pred. No. 3.2e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1657 CACCAGGCTCACAGCTG 1673
              ||||||| |  ||||||
Db          2 CACCAGGGTTCCAGCTG 18


RESULT 131
ABH80452
ID   ABH80452 standard; DNA; 12 BP.
XX
AC   ABH80452;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 280445 for detecting SNP TSC0008642.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 280445; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 0 C; 5 G; 4 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1703 AAGTTGGGTTAG 1714
              ||||||||||||
Db          1 AAGTTGGGTTAG 12


RESULT 132
ABH93471/c
ID   ABH93471 standard; DNA; 12 BP.
XX
AC   ABH93471;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 293464 for detecting SNP TSC0015629.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 293464; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 12 BP; 3 A; 5 C; 1 G; 3 T; 0 other;

  Query Match             8.6%;  Score 12;  DB 1;  Length 12;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   12;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1711 TTAGGAGTACGG 1722
              ||||||||||||
Db          12 TTAGGAGTACGG 1


RESULT 133
ABI12177/c
ID   ABI12177 standard; DNA; 12 BP.
XX
AC   ABI12177;
XX
DT   22-FEB-2002  (first entry)
XX
DE   Oligonucleotide primer SEQ ID NO 312150 for detecting SNP TSC0024874.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
```

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PD   05-DEC-2002.
XX
PF   29-MAY-2002; 2002WO-US16840.
XX
PR   29-MAY-2001; 2001US-294140P.
PR   06-JUN-2001; 2001US-296249P.
PR   10-SEP-2001; 2001US-318471P.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Mcswiggen J;
XX
DR   WPI; 2003-140484/13.
XX
PT   Novel short interfering RNA and enzymatic nucleic acid useful for
PT   treating cancer, modulates the expression of a nucleic acid encoding
PT   HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences  -
XX
PS   Claim 4; Page 142; 185pp; English.
XX
CC   The invention relates to a novel short interfering RNA (siRNA) nucleic
CC   acid molecule or an enzymatic nucleic acid molecule, that modulates
CC   expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC   human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC   acid molecule of the invention has cytostatic, anti-HIV, and
CC   anti-rheumatic activity. The nucleic acid molecules are useful for
CC   reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic
CC   acids are also useful for treating breast, ovarian, colorectal, lung,
CC   prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS.
CC   The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531,
CC   ABZ66520 - ABZ66524, ABZ66530 - ABZ66585 represent substrate/target
CC   sequences for the human ribozymes of the invention.
XX
SQ   Sequence 17 BP; 3 A; 9 C; 1 G; 4 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   64.7%;  Pred. No. 2.3e+02;
  Matches   11;  Conservative    3;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1749 CCTATCCTAAAGGCCCA 1765
              ||: :||:| | |||||
Db          1 CCUCUCCUACAUGCCCA 17


RESULT 129
AAA92642/c
ID   AAA92642 standard; DNA; 18 BP.
XX
AC   AAA92642;
XX
DT   04-JAN-2001  (first entry)
XX
DE   Antisense oligonucleotide ISIS# 30365.
XX
KW   Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
KW   SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
OS   Synthetic.
XX
PN   US6107092-A.
XX
PD   22-AUG-2000.
XX
PF   29-MAR-1999;   99US-0280409.
XX
PR   29-MAR-1999;   99US-0280409.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI   Cowsert LM,  Bennett CF,  O'Malley BW;
XX
DR   WPI; 2000-586211/55.
XX
PT   Antisense compounds targeted to steroid receptor RNA activator useful
PT   for diagnosis, prophylaxis and treatment of diseases associated with
PT   the steroid activator, such as infection, inflammation or tumor
PT   formation  -
XX
PS   Claim 3; Column 42; 47pp; English.
XX
CC   The present sequence is one of a large number of antisense
CC   oligonucleotides which is directed against one of four human steroid
CC   receptor RNA activator (SRA) nucleic acid sequences. Two series of
CC   antisense oligonucleotides were synthesised. The first series comprised
CC   8-30 oligodeoxynucleotides with a phosphorothioate backbone. The second
CC   series comprised chimeric oligonucleotides composed of a central gap
CC   region, consisting of ten 2'-deoxynucleotides, which was flanked on both
CC   sides by four-nucleotide wings. The wings were composed of
CC   2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same
CC   nucleotide sequences. The antisense compounds are useful for research,
CC   diagnosis, treatment and prophylaxis to prevent or delay infection,
CC   inflammation or tumour formation. Therapeutically the oligonucleotides
CC   are highly safe and are effectively administered to humans.
XX
SQ   Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 18;
  Best Local Similarity   82.4%;  Pred. No. 2.5e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1658 ACCAGGCTCACAGCTGG 1674
              ||||||||  |||| ||
Db         17 ACCAGGCTTCCAGCAGG 1


RESULT 130
AAI66686
ID   AAI66686 standard; DNA; 21 BP.
XX
AC   AAI66686;
XX
DT   07-JAN-2002  (first entry)
XX
DE   Human CETP DNA related PCR primer.
XX
KW   CETP; arteriosclerosis; cholesterol ester transfer protein; HDL;
KW   high density lipoprotein; human; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200171032-A1.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-JP02327.
XX
PR   24-MAR-2000; 2000JP-0084264.
XX
PA   (BMLB-) BML INC.
XX
PI   Nagano M,  Ito M,  Sagehashi Y,  Hattori H,  Egashira T,  Yamashita S;
PI   Matsuzawa Y;
XX
DR   WPI; 2001-611516/70.
XX
PT   Determining a risk factor for arteriosclerosis comprises detecting
PT   mutations in genes for cholesterol ester transfer protein.  -
XX
PS   Disclosure; Page 21; 58pp; Japanese.
XX
CC   The invention relates to detecting the risk factor for arteriosclerosis
CC   in a subject that involves detecting mutations in the gene for
CC   cholesterol ester transfer protein (CETP) related to the degree of risk
CC   of arteriosclerosis. The mutant proteins alter the level of HDL in the
CC   blood. The high frequency mutations can be detected for prevention and
```

```
PT   treating cancer, inflammatory disorders and autoimmune diseases  -
XX
PS   Claim 3; Page 56; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel
CC   enzymatic nucleic acid molecule.
XX
SQ   Sequence 17 BP; 4 A; 1 C; 11 G; 1 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCTATCC 1755
              ||| |||| |||| |||
Db         17 CCAGCTCCCCCCTTTCC 1


RESULT 127
ACA09103/c
ID   ACA09103 standard; RNA; 17 BP.
XX
AC   ACA09103;
XX
DT   03-JUN-2003  (first entry)
XX
DE   NFKB sub-unit modulating amberzyme substrate #266.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW   lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW   oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW   lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW   chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW   cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW   gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-0864785.
XX
PR   15-AUG-1994;   94US-0291932.
PR   07-DEC-1992;   92US-0987132.
PR   18-MAY-1994;   94US-0245466.
PR   23-DEC-1996;   96US-0777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression
PT   of a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases  -
XX
PS   Claim 3; Page 56; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel
CC   enzymatic nucleic acid molecule.
XX
SQ   Sequence 17 BP; 4 A; 1 C; 11 G; 1 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCCTATC 1754
              |||| |||| |||| ||
Db         17 CCCAGCTCCCCCCTTTC 1


RESULT 128
ABZ65014
ID   ABZ65014 standard; RNA; 17 BP.
XX
AC   ABZ65014;
XX
DT   21-MAR-2003  (first entry)
XX
DE   Human HER2 DNAzyme substrate #471.
XX
KW   Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW   enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW   anti-rheumatic; cancer; AIDS; ss.
XX
OS   Homo sapiens.
XX
PN   WO200297114-A2.
XX
```

```
  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1735 GCTCCCAACTCCTCCCT 1751
              | ||||||| |||| |
Db          1 GATCCCAACTGCTCCTT 17


RESULT 125
ACA07738
ID   ACA07738 standard; RNA; 17 BP.
XX
AC   ACA07738;
XX
DT   03-JUN-2003  (first entry)
XX
DE   NFKB sub-unit modulating zinzyme substrate #137.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW   lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW   oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW   lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW   chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW   cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW   gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-0864785.
XX
PR   15-AUG-1994;   94US-0291932.
PR   07-DEC-1992;   92US-0987132.
PR   18-MAY-1994;   94US-0245466.
PR   23-DEC-1996;   96US-0777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression
PT   of a sequence encoding a subunit of nuclear factor kappa B useful for
PT   treating cancer, inflammatory disorders and autoimmune diseases -
XX
PS   Claim 3; Page 39; 72pp; English.
XX
CC   The invention describes an enzymatic nucleic acid molecule (I) which down
CC   regulates expression of a sequence encoding a subunit of nuclear factor
CC   kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
CC   configuration. The enzymatic nucleic acid molecule is adapted to treat
CC   cancer and is useful for down-regulating REL-A activity in a cell, for
CC   treating a patient having a condition associated with the level of REL-A.
CC   (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
CC   the presence of a divalent cation, especially Mg^2^+. The enzymatic and
CC   antisense nucleic acid molecules are useful for treating breast, lung,
CC   prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
CC   cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
CC   multidrug resistant cancer. The method involves use of other drug
CC   therapies such as monoclonal antibodies, REL-A-specific inhibitors or
CC   chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
CC   cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
CC   gemcitabine or radiation therapy. The enzymatic and antisense nucleic
CC   acid molecules are also useful for treating inflammatory disease such as
CC   rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
CC   obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
CC   rejection, gene therapy applications, ischaemia/reperfusion injury
CC   (central nervous system (CNS) and myocardial), glomerulonephritis,
CC   sepsis, allergic airway inflammation, inflammatory bowel disease or
CC   infection. This sequence represents the substrate of a novel
CC   enzymatic nucleic acid molecule.
XX
SQ   Sequence 17 BP; 2 A; 5 C; 3 G; 7 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   52.9%;  Pred. No. 2.3e+02;
  Matches    9;  Conservative    5;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1676 ACCCTGGTGTCTCCTCC 1692
              ||| :||:|: :||: |
Db          1 ACCAUGGUGUUUCCUUC 17


RESULT 126
ACA09102/c
ID   ACA09102 standard; RNA; 17 BP.
XX
AC   ACA09102;
XX
DT   03-JUN-2003  (first entry)
XX
DE   NFKB sub-unit modulating amberzyme substrate #265.
XX
KW   Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
KW   G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
KW   lung cancer; prostate cancer; colorectal cancer; brain cancer;
KW   oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; head and neck cancer; ovarian cancer; melanoma;
KW   lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
KW   chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
KW   cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
KW   gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
KW   rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
KW   gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
KW   transplant/graft rejection; reperfusion injury; glomerulonephritis;
KW   allergic airway inflammation; inflammatory bowel disease; infection;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US2002177568-A1.
XX
PD   28-NOV-2002.
XX
PF   23-MAY-2001; 2001US-0864785.
XX
PR   15-AUG-1994;   94US-0291932.
PR   07-DEC-1992;   92US-0987132.
PR   18-MAY-1994;   94US-0245466.
PR   23-DEC-1996;   96US-0777916.
XX
PA   (STIN/) STINCHCOMB D T.
PA   (MCSW/) MCSWIGGEN J.
PA   (DRAP/) DRAPER K G.
XX
PI   Stinchcomb DT,  Mcswiggen J,  Draper KG;
XX
DR   WPI; 2003-340953/32.
XX
PT   Novel enzymatic nucleic acid molecules which down regulates expression
PT   of a sequence encoding a subunit of nuclear factor kappa B useful for
```

```
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 4 A; 4 C; 8 G; 1 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1672 TGGAACCCTGGTGTCTC 1688
              |||| ||||||  ||||
Db         17 TGGACCCCTGGCCTCTC 1


RESULT 123
ABT34389/c
ID   ABT34389 standard; DNA; 17 BP.
XX
AC   ABT34389;
XX
DT   12-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 26.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 37; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 4 A; 6 C; 3 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1641 TGTAGCAGAAGGCAAGC 1657
              |||||||||  ||| | |
Db         17 TGTAGCAGATGGCGATC 1


RESULT 124
ABT40165
ID   ABT40165 standard; DNA; 17 BP.
XX
AC   ABT40165;
XX
DT   13-JUN-2003  (first entry)
XX
DE   Tumour suppression related human fukutin oligo SEQ ID No 5802.
XX
KW   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW   antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW   schizophrenia; protein chip; gene therapy; tumour suppression;
KW   human fukutin; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003025175-A2.
XX
PD   27-MAR-2003.
XX
PF   17-SEP-2002; 2002WO-IB04208.
XX
PR   17-SEP-2001; 2001FR-0011978.
XX
PA   (MOLE-) MOLECULAR ENGINES LAB.
XX
PI   Telerman A,  Amson R,  Tuijnder M;
XX
DR   WPI; 2003-313353/30.
XX
PT   New isolated nucleic acid, useful for treating viral diseases
PT   associated with tumors and cell degeneration, also related
PT   polypeptides, antibodies and transfected cells  -
XX
PS   Disclosure; Page 712; 720pp; French.
XX
CC   The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC   given in the specification, a sequence containing at least 15
CC   consecutive nucleotides from the 17 mer sequence, a sequence with, after
CC   optimal alignment, at least 80 % identity to the 17 mer sequence, a
CC   sequence that hybridizes to them under highly stringent conditions, or
CC   the complement of any of them, or the corresponding RNA. The novel
CC   isolated nucleic acids of the invention are useful as probes and primers
CC   for detecting, identifying, quantifying and/or amplifying a nucleic acid,
CC   e.g. as one component of a gene chip, in vitro as (anti)sense reagents,
CC   and for production of recombinant polypeptides. Any of the nucleic acids,
CC   polypeptides, vectors containing the nucleic acids, cells containing the
CC   vector or antibodies directed against the polypeptides are useful for
CC   preparation of pharmaceuticals for prevention and/or treatment of viral
CC   diseases that are characterised by development of tumours or cell
CC   degeneration, specifically cancer but also Alzheimer's disease and
CC   schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC   patient samples is useful for diagnosis and/or prognosis of these
CC   diseases. The polypeptides can also be used to generate antibodies, and
CC   both the polypeptide and antibodies are useful as components of protein
CC   chips. The nucleic acid sequences of the invention can be used in gene
CC   therapy. This polynucleotide sequence represents a tumour suppression
CC   related human fukutin oligonucleotide of the invention.
XX
SQ   Sequence 17 BP; 3 A; 7 C; 2 G; 5 T; 0 other;
```

```
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 7831; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1661 AGGCTCACAGCTGGAAC 1677
              || |||||||||| | |
Db          1 AGCCTCACAGCTGAAGC 17
```

```
RESULT 122
ABN09666/c
ID   ABN09666 standard; DNA; 17 BP.
XX
AC   ABN09666;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9658.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 9658; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
```

```
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 528; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 7 A; 4 C; 4 G; 2 T; 0 other;

  Query Match              8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1645 GCAGAAGGCAAGCACCA 1661
              ||||| | |||||| ||
Db          1 GCAGATGACAAGCATCA 17


RESULT 120
ABN01272/c
ID   ABN01272 standard; DNA; 17 BP.
XX
AC   ABN01272;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1264.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 1264; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 3 A; 2 C; 8 G; 4 T; 0 other;

  Query Match              8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1729 AGATTGGCTCCCAACTC 1745
              |||| | | ||||||||
Db         17 AGATCGTCCCCCAACTC 1


RESULT 121
ABN07839
ID   ABN07839 standard; DNA; 17 BP.
XX
AC   ABN07839;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7831.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
```

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XX
PS   Example 1; Page 22; 131pp; English.
XX
CC   The invention describes a cytochrome P450 protein (I) in which CYP3A43
CC   exon 1 is joined to sets of CYP3A4 or CYP3A5 exons, as well as sub
CC   fragments, variants and multiples of (I) having essentially the same
CC   characteristics. (I) Is useful as a medicament, and for evaluating drug
CC   metabolism, in drug design, and drug screening, and in tests for
CC   adjusting the dose of drugs. This sequence represents a primer used
CC   to isolate DNA encoding the novel cytochrome P450 of the invention.
XX
SQ   Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1673 GGAACCCTGGTGTCTCC 1689
              |||| |||||  |||||
Db          1 GGAAACCTGGCTTCTCC 17


RESULT 118
ABN00535
ID   ABN00535 standard; DNA; 17 BP.
XX
AC   ABN00535;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:527.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Gu Y,  Ji Y,  Penn SG,  Hanzel DK,  Rank DR,  Chen W,  Shannon ME;
XX
DR   WPI; 2002-179446/23.
XX
PT   New polypeptide, for raising antibodies that recognize hGDMLP-1
PT   proteins, or as specific biomolecule capture probes for
PT   surface-enhanced laser desorption ionization, comprises human
PT   myosin-like protein hGDMLP-1 -
XX
PS   Disclosure; SEQ ID 527; 214pp; English.
XX
CC   The present invention describes a human genome-derived myosin-like
CC   protein 1 (hGDMLP-1). The protein and polynucleotide sequences of
CC   hGDMLP-1 can be used in gene therapy and vaccine production. The
CC   hGDMLP-1 nucleic acids can be used as probes to detect, characterise
CC   and quantify hGDMLP-1 nucleic acids in samples, as amplification
CC   substrates, to provide initial substrates for the recombinant engineering
CC   of hGDMLP-1 protein variants having desired phenotypic improvements, and
CC   for expressing the proteins. The hGDMLP-1 proteins or polypeptides may
CC   be used as immunogens to raise antibodies that specifically recognise
CC   hGDMLP-1 proteins, as standards in assays used to determine the
CC   concentration and/or amount specifically of hGDMLP proteins, as specific
CC   biomolecule capture probes for surface-enhanced laser desorption
CC   ionisation, as therapeutic supplement in patients having specific
CC   deficiency in hGDMLP-1 production, and in vaccines or for replacement
CC   therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for
CC   diagnosing a disorder associated with the expression of hGDMLP-1, in
CC   particular heart and skeletal muscle disorders. hGDMLP-1 is localised to
CC   chromosome 22. The present sequence represents an oligomer used in the
CC   screening of the hGDMLP-1 sequence in the exemplification of the present
CC   invention.
CC   N.B. The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequence.
XX
SQ   Sequence 17 BP; 7 A; 4 C; 4 G; 2 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1644 AGCAGAAGGCAAGCACC 1660
              |||||| | |||||| |
Db          1 AGCAGATGACAAGCATC 17


RESULT 119
ABN00536
ID   ABN00536 standard; DNA; 17 BP.
XX
AC   ABN00536;
XX
DT   29-MAY-2002  (first entry)
XX
DE   Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:528.
XX
KW   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
KW   muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW   skeletal muscle disorder; amplicon; screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200192524-A2.
XX
PD   06-DEC-2001.
XX
PF   25-MAY-2001; 2001WO-US16981.
XX
PR   26-MAY-2000; 2000US-207456P.
PR   21-SEP-2000; 2000US-234687P.
PR   27-SEP-2000; 2000US-236359P.
PR   04-OCT-2000; 2000GB-0024263.
PR   30-JAN-2001; 2001WO-US00661.
PR   30-JAN-2001; 2001WO-US00662.
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   05-FEB-2001; 2001US-266860P.
XX
```

XX
PS Example 2; SEQ ID NO 1762; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention.
CC Note: The present sequence did not form part of the printed
CC specification, but is based on sequence information supplied to Derwent
CC by the European Patent Office.
XX
SQ Sequence 17 BP; 5 A; 2 C; 6 G; 4 T; 0 other;

Query Match 8.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1749 CCTATCCTAAAGGCCCA 1765
| | |||||||| ||||
Db 17 CTTGTCCTAAAGTCCCA 1

RESULT 116
ABV91050/c
ID ABV91050 standard; DNA; 17 BP.
XX
AC ABV91050;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1763.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-0001165.
XX
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 23-MAY-2001; 2001US-0864761.
PR 10-OCT-2001; 2001US-0328205.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT POSHL-1, useful for treating disorders associated with decreased
PT expression or activity of human POSHL1 -
XX
PS Example 2; SEQ ID NO 1763; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention.
CC Note: The present sequence did not form part of the printed
CC specification, but is based on sequence information supplied to Derwent
CC by the European Patent Office.
XX
SQ Sequence 17 BP; 5 A; 2 C; 7 G; 3 T; 0 other;

Query Match 8.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1748 CCCTATCCTAAAGGCCC 1764
|| | |||||||| |||
Db 17 CCTTGTCCTAAAGTCCC 1

RESULT 117
ABK97683
ID ABK97683 standard; DNA; 17 BP.
XX
AC ABK97683;
XX
DT 07-OCT-2002 (first entry)
XX
DE Cytochrome P450 3A (CYP3A) PCR primer #1.
XX
KW Cytochrome P450; CYP3AP1; CYP3AP2; CYP3A43; CYP3A4; CYP3A5; CYP3A7;
KW drug metabolism; drug design; drug screening; PCR; primer; ss.
XX
OS Synthetic.
XX
PN WO200244213-A1.
XX
PD 06-JUN-2002.
XX
PF 28-NOV-2001; 2001WO-SE02631.
XX
PR 28-NOV-2000; 2000SE-0004366.
PR 11-JUN-2001; 2001SE-0002061.
XX
PA (ZAPH/) ZAPHIROPOULOS P G.
PA (FINT/) FINTA C.
XX
PI Zaphiropoulos PG, Finta C;
XX
DR WPI; 2002-557532/59.
XX
PT Novel cytochrome P450 protein in which CYP3A43 exon 1 is joined to sets
PT of CYP3A4 or CYP3A5 exons, useful as medicament, and in evaluating drug
PT metabolism, in drug design and drug screening -

```
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1673 GGAACCCTGGTGTCTCC 1689
              ||| ||||||| ||| |
Db          1 GGAGCCCTGGTCTCTAC 17


RESULT 114
ABV90899
ID   ABV90899 standard; DNA; 17 BP.
XX
AC   ABV90899;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1612.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
XX
PS   Example 2; SEQ ID NO 1612; 60pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated SH3 domain (POSH)-like signalling
CC   protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC   acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC   (S1) having 95% deviations, especially conservative substitutions or a
CC   fragment of the sequences comprising at least 8 contiguous amino acids.
CC   Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC   adaptor protein that interacts with Rho family small GTPases as well as
CC   downstream components of the signal transduction pathway. (I) is useful
CC   for identifying a specific binding partner. (I) and nucleic acids (II)
CC   encoding (I) are useful for diagnosing, monitoring disease and treating
CC   caused by altered expression of human POSHL1 including diagnosing and
CC   treating cancer, they useful in the development of vaccines and (II) is
CC   useful in gene therapy. (II) is useful for constructing microarrays which
CC   are useful for measuring and for surveying gene expression and creating
CC   transgenic non-human animals capable of producing the proteins. The
CC   present sequence is that of a scanning oligonucleotide useful in examples
CC   of the invention.
CC   Note: The present sequence did not form part of the printed
CC   specification, but is based on sequence information supplied to Derwent
CC   by the European Patent Office.
XX
SQ   Sequence 17 BP; 3 A; 8 C; 2 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1677 CCCTGGTGTCTCCTCCA 1693
              ||||||| ||| | |||
Db          1 CCCTGGTCTCTACACCA 17


RESULT 115
ABV91049/c
ID   ABV91049 standard; DNA; 17 BP.
XX
AC   ABV91049;
XX
DT   23-DEC-2002  (first entry)
XX
DE   Human POSHL1 scanning oligonucleotide SEQ ID NO 1762.
XX
KW   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW   Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW   gene therapy; transgenic; ss.
XX
OS   Homo sapiens.
XX
PN   EP1239051-A2.
XX
PD   11-SEP-2002.
XX
PF   28-JAN-2002; 2002EP-0001165.
XX
PR   30-JAN-2001; 2001WO-US00663.
PR   30-JAN-2001; 2001WO-US00664.
PR   30-JAN-2001; 2001WO-US00665.
PR   30-JAN-2001; 2001WO-US00666.
PR   30-JAN-2001; 2001WO-US00667.
PR   30-JAN-2001; 2001WO-US00668.
PR   30-JAN-2001; 2001WO-US00669.
PR   30-JAN-2001; 2001WO-US00670.
PR   23-MAY-2001; 2001US-0864761.
PR   10-OCT-2001; 2001US-0328205.
XX
PA   (AEOM-) AEOMICA INC.
XX
PI   Shannon M;
XX
DR   WPI; 2002-684061/74.
XX
PT   Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT   POSHL-1, useful for treating disorders associated with decreased
PT   expression or activity of human POSHL1 -
```

CC such disorder associated with decreased expression or activity of human
CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
CC clinically useful diagnostic markers and potenial therapeutic agents for
CC male infertility and cancer. The present oligonucleotide was used in an
CC example from the invention.
XX
SQ Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 other;

Query Match 8.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1662 GGCTCACAGCTGGAACC 1678
| ||||| |||||| ||
Db 1 GACTCACTGCTGGACCC 17

RESULT 112
ABV90893
ID ABV90893 standard; DNA; 17 BP.
XX
AC ABV90893;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1606.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-0001165.
XX
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 23-MAY-2001; 2001US-0864761.
PR 10-OCT-2001; 2001US-0328205.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT POSHL-1, useful for treating disorders associated with decreased
PT expression or activity of human POSHL1 -
XX
PS Example 2; SEQ ID NO 1606; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention.
CC Note: The present sequence did not form part of the printed
CC specification, but is based on sequence information supplied to Derwent
CC by the European Patent Office.
XX
SQ Sequence 17 BP; 1 A; 7 C; 5 G; 4 T; 0 other;

Query Match 8.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 2.3e+02;
Matches 14; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1671 CTGGAACCCTGGTGTCT 1687
| ||| ||||||| |||
Db 1 CCGGAGCCCTGGTCTCT 17

RESULT 113
ABV90895
ID ABV90895 standard; DNA; 17 BP.
XX
AC ABV90895;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human POSHL1 scanning oligonucleotide SEQ ID NO 1608.
XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-0001165.
XX
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00666.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 30-JAN-2001; 2001WO-US00670.
PR 23-MAY-2001; 2001US-0864761.
PR 10-OCT-2001; 2001US-0328205.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signalling protein 1 polypeptide,
PT POSHL-1, useful for treating disorders associated with decreased
PT expression or activity of human POSHL1 -
XX
PS Example 2; SEQ ID NO 1608; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
CC (S1) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.

DT 12-MAR-2002 (first entry)
XX
DE Human NOGO Hammerhead Ribozyme #576.
XX
KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
KW cerebroprotective; nootropic; neuroprotective; antiparkinsonian;
KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
KW DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
KW inflammatory arthropathy; central nervous system injury;
KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
KW Parkinson's disease; ataxia; Huntington's disease;
KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200159103-A2.
XX
PD 16-AUG-2001.
XX
PF 09-FEB-2001; 2001WO-US04273.
XX
PR 11-FEB-2000; 2000US-181797P.
PR 28-FEB-2000; 2000US-185516P.
PR 06-MAR-2000; 2000US-187128P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MCSW/) MCSWIGGEN J.
PA (CHOW/) CHOWRIRA B M.
XX
PI Blatt L, McSwiggen J, Chowrira BM;
XX
DR WPI; 2001-607195/69.
XX
PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
PT constructs, which down regulate expression of a CD20 gene or neurite
PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
PT and central nervous system injury -
XX
PS Claim 88; Page 75; 200pp; English.
XX
CC The invention relates to a nucleic acid molecule which down regulates
CC expression of a CD20 gene and a nucleic acid molecule which down
CC regulates expression of a neurite growth inhibitor gene (NOGO).
CC The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
CC DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN
CC motif) pr an amberzyme (cleaving RNA with an NGN triplet), a zinzyme
CC (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used
CC to cleave RNA of CD20 in the presence of a divalent cation that is
CC preferably Mg^2^+. Furthermore, it may be contacted with a cell to reduce
CC CD20 activity of the cell and treat a patient having a condition
CC associated with the level of CD20. The treatment may further comprise the
CC use of one or more therapies. In particular, the CD20 targetting
CC nucleic acid may be used to treat lymphoma, leukaemia, B-cell
CC lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky
CC low-grade or follicular NHL, lymphocytic leukaemia, HIV (human
CC immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL),
CC immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune
CC thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting
CC nucleic acid is used to cleave RNA of the NOGO gene in the presence of a
CC divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid
CC may be contacted with a cell to reduce NOGO activity of the cell and
CC treat a patient having a condition associated with the level of NOGO. The
CC treatment may further comprise the use of one or more therapies.
CC In particular, the NOGO-targetting nucleic acid may be used to treat
CC central nervous system (CNS) injury and cerebrovascular accident (CVA,
CC stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
CC disease, muscular dystrophy, and/or other neurodegenerative disease
CC states which respond to the modulation of NOGO expression. The
CC present sequence is a hammerhead ribozyme of the invention.
XX
SQ Sequence 17 BP; 5 A; 2 C; 5 G; 5 U; 0 other;

Query Match 8.8%; Score 12.2; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 2.3e+02;
Matches 10; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

Qy 1704 AGTTGGGTTAGGAGTAC 1720
||::|| : || ||:||
Db 1 AGUUGGUUCAGAAGUAC 17

RESULT 111
ABV79506
ID ABV79506 standard; DNA; 17 BP.
XX
AC ABV79506;
XX
DT 03-JAN-2003 (first entry)
XX
DE Human HTPL scanning oligonucleotide SEQ ID 752.
XX
KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX
OS Homo sapiens.
XX
PN EP1229046-A2.
XX
PD 07-AUG-2002.
XX
PF 28-JAN-2002; 2002EP-0001167.
XX
PR 30-JAN-2001; 2001WO-US00663.
PR 30-JAN-2001; 2001WO-US00664.
PR 30-JAN-2001; 2001WO-US00665.
PR 30-JAN-2001; 2001WO-US00667.
PR 30-JAN-2001; 2001WO-US00668.
PR 30-JAN-2001; 2001WO-US00669.
PR 23-MAY-2001; 2001US-0864761.
PR 09-OCT-2001; 2001US-0327898.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Zhan J;
XX
DR WPI; 2002-676582/73.
XX
PT Novel isolated human testis expressed Patched like protein (HTPL),
PT useful for identifying agonist and antagonist and specific binding
PT partners, and for treating subjects having defects in HTPL -
XX
PS Example 2; Page 162; 718pp; English.
XX
CC The present invention relates to human testis expressed Patched like
CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
CC has two isoforms, with a few single base pair differences between the
CC two. One of the single base pair changes introduces a premature stop
CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
CC shares an overall structure organisation with the Patched protein. The
CC shared structural features strongly imply that HTPL plays a role similar
CC to that of Patched, and is a potential tumour suppressor. HTPL is
CC important in regulating male germ cell development, and the HTPL gene was
CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
CC useful for diagnosing a disorder caused by mutation in HTPL, and in
CC therapy and manufacture of a medicament for treatment or prevention of

```
XX
AC   AAA55987;
XX
DT   05-SEP-2000  (first entry)
XX
DE   Murine G713 amplification PCR primer SEQ ID NO:26.
XX
KW   Human; chromosome 13; G713; chromosome 13q31-q33; schizophrenia;
KW   biallelic marker; polymorphism; central nervous disease; detection;
KW   neuroleptic; G713 gene expression inhibitor; genotyping; PCR primer;
KW   brain disorder; psychiatric disorder; bipolar disorder; ss.
XX
OS   Mus musculus.
XX
PN   WO200022122-A2.
XX
PD   20-APR-2000.
XX
PF   12-OCT-1999;   99WO-IB01730.
XX
PR   13-OCT-1998;   98US-0103955.
PR   30-OCT-1998;   98US-0106457.
XX
PA   (GEST ) GENSET.
XX
PI   Blumenfeld M,  Bougueleret L,  Chumakov I,  Cohen D,  Essioux L;
XX
DR   WPI; 2000-317979/27.
XX
PT   Novel polynucleotide of human G713 gene useful for diagnosis and
PT   prophylactic treatment of brain, psychiatric disorders like
PT   schizophrenia and bipolar disorders  -
XX
PS   Example 1; Page 144; 271pp; English.
XX
CC   The present invention describes an isolated, purified or recombinant
CC   polynucleotide (PN) (I) comprising a contiguous span of 8 to 50
CC   nucleotides, where the span includes a G713 or chromosome 13q31-q33
CC   related biallelic marker. (I) has neuroleptic activity and can be used
CC   as a G713 gene expression inhibitor. (I) can be used genotyping to
CC   estimate the frequency of an allele of a G713 or chromosome 13q31-q33
CC   related biallelic marker in a population, and of a haplotype for a set
CC   of biallelic markers in a population. (I) is also useful in detecting
CC   an association between a haplotype and a trait. The frequency is used
CC   for detecting an association between a genotype and a trait being
CC   schizophrenia. The genotype is used to determine whether an individual
CC   is at risk of developing schizophrenia. (I) can also be used as a
CC   medicament against several disorders preferably brain, psychiatric
CC   disorders such as schizophrenia and bipolar disorder. Early
CC   identification of risk of developing schizophrenia is possible, which
CC   would enable early and/or prophylactic treatment. AAA55964 to AAA55966
CC   represent human G713 genomic DNA sequences; AAA55967 encodes the human
CC   G713 protein AAY90962; AAA55968 encodes the murine G713 protein
CC   AAY90963; AAA55992 to AAA56030 represent human chromosome 13q31-q33 locus
CC   biallelic markers A12 to A49; AAA55969 to AAA55991, and AAA56031 and
CC   AAA56032 represent PCR primers used in the exemplification of the present
CC   invention.
XX
SQ   Sequence 17 BP; 1 A; 4 C; 8 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1685 TCTCCTCCAGCGTGGTG 1701
              | ||||| ||||||| |
Db          1 TGTCCTCGAGCGTGGGG 17


RESULT 109
AAA24962
ID   AAA24962 standard; DNA; 17 BP.
XX
AC   AAA24962;
XX
DT   19-JUL-2000  (first entry)
XX
DE   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1460.
XX
KW   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW   hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW   gene expression modification; cancer; phosphorothioate; endonuclease;
KW   anticancer; breast cancer; endometrium cancer; ss.
XX
OS   Homo sapiens.
XX
PN   WO9954459-A2.
XX
PD   28-OCT-1999.
XX
PF   19-APR-1999;   99WO-US08547.
XX
PR   20-APR-1998;   98US-0082404.
PR   23-JUN-1998;   98US-0103636.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Thompson JD,  Beigelman L,  McSwiggen JA,  Karpeisky A,  Bellon L;
PI   Reynolds M,  Zwick M,  Jarvis T,  Woolf T,  Haeberli P;
PI   Matulic-Adamic J;
XX
DR   WPI; 2000-013248/01.
XX
PT   New nucleic acids that interact, and optionally cleave, target
PT   sequences, used to treat cancer  -
XX
PS   Claim 77; Page 64; 148pp; English.
XX
CC   The present invention describes nucleic acids (A) that interact stably
CC   with a target sequence and contain at least one phosphoro(di)thioate
CC   link, having endonuclease activity. (A), and more generally any
CC   catalytic nucleic acid (A') that modulates expression of the oestrogen
CC   receptor gene, are used to treat cancer (particularly of breast or
CC   endometrium), in vivo or by transforming cells ex vivo and implanting
CC   treated cells, or for other conditions associated with levels of
CC   oestrogen receptor. Because of the high selectivity for targeted RNA, (A)
CC   can also be used to correlate inhibition of gene expression with
CC   alterations in phenotype, particularly for identification of therapeutic
CC   targets, and as research reagents (for RNA, in the  same way that
CC   restriction endonucleases are used with DNA). The combination of
CC   modifications in (A) improves resistance to nucleases, binding affinity
CC   and/or activity. AAA23503 to AAA24747 represent oestrogen receptor
CC   hammerhead ribozyme sequences, and AAA24748 to AAA25992 represent their
CC   corresponding target sequences. AAA25993 to AAA26105 represent oestrogen
CC   receptor hairpin ribozyme sequences, and AAA26107 to AAA26218 represent
CC   their corresponding target sequences. AAA26219 to AAA26271 represent
CC   other ribozyme sequences and antisense oligonucleotides used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 17 BP; 2 A; 9 C; 1 G; 5 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1740 CAACTCCTCCCTATCCT 1756
              || ||||||| |||||
Db          1 CAGCTCCTCCTCATCCT 17


RESULT 110
ABK00576
ID   ABK00576 standard; RNA; 17 BP.
XX
AC   ABK00576;
XX
```

```
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1665 TCACAGCTGGAACCCTG 1681
              | ||||| | |||||||
Db         17 TGACAGCGGAAACCCTG 1


RESULT 106
AAV91297
ID   AAV91297 standard; RNA; 17 BP.
XX
AC   AAV91297;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human C-raf target site nucleotide position 2318.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene;
KW   delivery; screening; identification; synthesis; deprotection;
KW   purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW   infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US09249.
XX
PR   19-DEC-1997;   97US-0068212.
PR   09-MAY-1997;   97US-0046059.
PR   09-JUN-1997;   97US-0049002.
PR   03-JUL-1997;   97US-0051718.
PR   22-AUG-1997;   97US-0056808.
PR   02-OCT-1997;   97US-0061321.
PR   02-OCT-1997;   97US-0061324.
PR   05-NOV-1997;   97US-0064866.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Beaudry A,  Beigelman L,  Bellon L,  Burgin A,  Jarvis T;
PI   Karpeisky A,  Kisich K,  Matulic-Adamic J,  McSwiggen JA;
PI   Parry T,  Reynolds M,  Sweedler D,  Thompson J,  Workman CT;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected
PT   processes - especially ribozymes that cleave Raf RNA for treating
PT   cancer, restenosis, and also new ribozymes and modified nucleoside
PT   triphosphates used as antiviral agents and synthons
XX
PS   Claim 177; Page 152; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
CC   acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC   a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC   in systems where modulation has occurred and/or determining the sequence
CC   of at least part of the SBDs in such systems. Nucleic acid molecules
CC   with endonuclease activity and catalytic activity, from the present
CC   invention, are used to modulate gene expression in plant and mammalian
CC   cells and to cleave target nucleic acid, particularly for treating
CC   systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC   psoriasis, non-hepatic ascites and infection. They may also be used to
CC   detect genetic drift and mutations in diseased cells and to determine
CC   c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC   expression of the Raf gene, are used to treat cancer, restenosis,
CC   psoriasis or rheumatoid arthritis, or generally any condition associated
CC   with the level of c-raf. Introduction of sugar/phosphate modifications
CC   increases stability against nuclease and activity. AAV90922 to AAV93877
CC   represent NACs that can be used in the method, specifically for
CC   modulating the expression of a Raf gene.
XX
SQ   Sequence 17 BP; 4 A; 8 C; 3 G; 2 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   70.6%;  Pred. No. 2.3e+02;
  Matches   12;  Conservative    2;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1749 CCTATCCTAAAGGCCCA 1765
              || |: |: ||||||||
Db          1 CCCAUGCUCAAGGCCCA 17


RESULT 107
AAF01989/c
ID   AAF01989 standard; DNA; 17 BP.
XX
AC   AAF01989;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #284.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 62; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 4 A; 6 C; 3 G; 4 T; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1638 GCTTGTAGCAGAAGGCA 1654
              ||||||| ||| | ||
Db         17 GCTTGTAGTAGAGGCCA 1


RESULT 108
AAA55987
ID   AAA55987 standard; DNA; 17 BP.
```

```
CC   oligonucleotides of the invention.
XX
SQ   Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.1e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1686 CTCCTCCAGCGTGG 1699
              ||||||||||  |||
Db          4 CTCCTCCAGCTTGG 17


RESULT 104
AAT03827
ID   AAT03827 standard; DNA; 17 BP.
XX
AC   AAT03827;
XX
DT   18-MAR-1996  (first entry)
XX
DE   HLA-C-clone 10 polymerase chain reaction (PCR) primer.
XX
KW   HLA; cellular disorder; melanoma; diagnosis; identification; T cell;
KW   cytotoxic; immune response; ss.
XX
OS   Homo sapiens.
XX
PN   WO9521630-A1.
XX
PD   17-AUG-1995.
XX
PF   26-JAN-1995;   95WO-US01446.
XX
PR   18-AUG-1994;   94US-0292492.
PR   14-FEB-1994;   94US-0195186.
PR   15-FEB-1994;   94US-0196630.
XX
PA   (LUDW-) LUDWIG INST CANCER RES.
XX
PI   Boel P,  Boon-Falleur T,  Coulie P,  Szikora J,  Van Der Bruggen P;
PI   Wildmann C;
XX
DR   WPI; 1995-292948/38.
XX
PT   Identification of cells presenting HLA-C-clone 10 or MAGE-1 derived
PT   peptide - allows diagnosis and treatment of individuals with
PT   cellular abnormalities, e.g. melanoma, also HLA-Cw*1601 derived
PT   peptide(s)
XX
PS   Claim 20; Page 19; 26pp; English.
XX
CC   HLA-C-clone 10 is presented on the surface of certain abnormal cells,
CC   MAGE-1 is also expressed by these cells. AAT03827-T03830 are PCR
CC   primers for the HLA molecule that may be used in a kit to determine
CC   the expression of HLA-C-clone 10. Peptides of such molecules that are
CC   expressed and presented on the surface of abnormal cells are useful
CC   for the identification of abnormal cells and thus they allow diagnosis
CC   and treatment of cellular abnormalities, e.g. melanoma and other
CC   cancers. The isolated nucleic acid molecules coding for the peptides
CC   are also useful as probes for the determination of HLA-clone-C
CC   expression. HLA-C-clone 10 is also known as HLA-Cw*1601.
XX
SQ   Sequence 17 BP; 6 A; 6 C; 5 G; 0 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
  Best Local Similarity   82.4%;  Pred. No. 2.3e+02;
  Matches   14;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1653 CAAGCACCAGGCTCACA 1669
              |||||  ||||||  || |
Db          1 CAAGCGCCAGGCACAGA 17


RESULT 105
AAV93415/c
ID   AAV93415 standard; RNA; 17 BP.
XX
AC   AAV93415;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human B-raf substrate nucleotide position 835.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene;
KW   delivery; screening; identification; synthesis; deprotection;
KW   purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW   infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US09249.
XX
PR   19-DEC-1997;   97US-0068212.
PR   09-MAY-1997;   97US-0046059.
PR   09-JUN-1997;   97US-0049002.
PR   03-JUL-1997;   97US-0051718.
PR   22-AUG-1997;   97US-0056808.
PR   02-OCT-1997;   97US-0061321.
PR   02-OCT-1997;   97US-0061324.
PR   05-NOV-1997;   97US-0064866.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Beaudry A,  Beigelman L,  Bellon L,  Burgin A,  Jarvis T;
PI   Karpeisky A,  Kisich K,  Matulic-Adamic J,  McSwiggen JA;
PI   Parry T,  Reynolds M,  Sweedler D,  Thompson J,  Workman CT;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected
PT   processes - especially ribozymes that cleave Raf RNA for treating
PT   cancer, restenosis, and also new ribozymes and modified nucleoside
PT   triphosphates used as antiviral agents and synthons
XX
PS   Claim 177; Page 167; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
CC   acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC   a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC   in systems where modulation has occurred and/or determining the sequence
CC   of at least part of the SBDs in such systems. Nucleic acid molecules
CC   with endonuclease activity and catalytic activity, from the present
CC   invention, are used to modulate gene expression in plant and mammalian
CC   cells and to cleave target nucleic acid, particularly for treating
CC   systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC   psoriasis, non-hepatic ascites and infection. They may also be used to
CC   detect genetic drift and mutations in diseased cells and to determine
CC   c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC   expression of the Raf gene, are used to treat cancer, restenosis,
CC   psoriasis or rheumatoid arthritis, or generally any condition associated
CC   with the level of c-raf. Introduction of sugar/phosphate modifications
CC   increases stability against nuclease and activity. AAV90922 to AAV93877
CC   represent NACs that can be used in the method, specifically for
CC   modulating the expression of a Raf gene.
XX
SQ   Sequence 17 BP; 2 A; 5 C; 5 G; 5 U; 0 other;

  Query Match             8.8%;  Score 12.2;  DB 1;  Length 17;
```

```
SQ   Sequence 17 BP; 3 A; 8 C; 0 G; 6 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.1e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1696 GTGGTGGAAGTTGG 1709
                | ||||||||||||
Db         15 GAGGTGGAAGTTGG 2


RESULT 102
ABA80624/c
ID   ABA80624 standard; DNA; 17 BP.
XX
AC   ABA80624;
XX
DT   24-JAN-2002  (first entry)
XX
DE   APOE mutation correcting oligonucleotide SEQ ID NO: 3470.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US09761.
XX
PR   27-MAR-2000; 2000US-192176P.
PR   27-MAR-2000; 2000US-192179P.
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification -
XX
PS   Claim 7; Page 234; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
CC   oligonucleotides of the invention.
XX
SQ   Sequence 17 BP; 5 A; 4 C; 7 G; 1 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.1e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1686 CTCCTCCAGCGTGG 1699
                ||||||||||  |||
Db         14 CTCCTCCAGCTTGG 1


RESULT 103
ABA80625
ID   ABA80625 standard; DNA; 17 BP.
XX
AC   ABA80625;
XX
DT   24-JAN-2002  (first entry)
XX
DE   APOE mutation correcting oligonucleotide SEQ ID NO: 3471.
XX
KW   Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
KW   retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
KW   cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
KW   adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
KW   haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE;
KW   mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
KW   familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
KW   UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
KW   Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
KW   antilipemic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200173002-A2.
XX
PD   04-OCT-2001.
XX
PF   27-MAR-2001; 2001WO-US09761.
XX
PR   27-MAR-2000; 2000US-192176P.
PR   27-MAR-2000; 2000US-192179P.
PR   01-JUN-2000; 2000US-208538P.
PR   30-OCT-2000; 2000US-244989P.
XX
PA   (UYDE ) UNIV DELAWARE.
XX
PI   Kmiec EB,  Gamper HB,  Rice MC;
XX
DR   WPI; 2001-639230/73.
XX
PT   Oligonucleotide for targeted alterations of genetic sequences and for
PT   treating cystic fibrosis, comprises at least one mismatch and chemical
PT   modification -
XX
PS   Claim 7; Page 234; 294pp; English.
XX
CC   The present invention provides single-stranded oligonucleotides which can
CC   be used for the targeted alteration of genomic sequences, where the
CC   oligonucleotide has at least one mismatch compared with the genomic
CC   sequence to be altered. In particular, these sequences are directed at
CC   the following genes: adenosine deaminase, p53, beta-globin,
CC   retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
CC   (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
CC   1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
CC   apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
CC   (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
CC   presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
CC   such as cancer, adenosine deaminase deficiency, cystic fibrosis,
CC   haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
CC   Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
CC   various syndromes. The present sequence is one of the gene correcting
```

```
DE   Histiocyte-secreted factor 3' PCR primer.
XX
KW   Histiocyte-secreted factor; HSF; cytokine; antitumour; tumour;
KW   therapy; polymerase chain reaction; PCR; primer; ss.
XX
OS   Synthetic.
XX
PN   WO9613586-A2.
XX
PD   09-MAY-1996.
XX
PF   26-OCT-1995;   95WO-JP02200.
XX
PR   26-OCT-1994;   94JP-0297780.
XX
PA   (SATO/) SATOMI N.
XX
PI   Satomi N;
XX
DR   WPI; 1996-239499/24.
XX
PT   DNA encoding histiocyte-secreted factor and its variants - useful as
PT   an anti-tumour agent and for studying tumour regression, having low
PT   cytotoxicity compared to TNF
XX
PS   Example 5; Page 28; 52pp; English.
XX
CC   A 5' PCR primer (AAT14820) and 3' primer (AAT14821) are based on
CC   peptides derived from rabbit histiocyte-secreted factor (HSF).
CC   They were used to amplify DNA from human TYH histiocytic cells,
CC   yielding the PCR product given in AAT14819.  They were also
CC   used to amplify DNA from U-937 (human histiocytic lymphoma)
CC   cells, which revealed PCR products that led to the identification
CC   of a genomic clone (AAT14818) coding for human HSF (AAR96800), a
CC   novel cytokine.
XX
SQ   Sequence 17 BP; 6 A; 5 C; 5 G; 1 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.1e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCAC 1668
              || |||||||||||
Db          2 AGAACCAGGCTCAC 15


RESULT 100
AAF02929/c
ID   AAF02929 standard; DNA; 17 BP.
XX
AC   AAF02929;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1224.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 83; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
SQ   Sequence 17 BP; 3 A; 9 C; 0 G; 5 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.1e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1696 GTGGTGGAAGTTGG 1709
              | ||||||||||||
Db         16 GAGGTGGAAGTTGG 3


RESULT 101
AAF02930/c
ID   AAF02930 standard; DNA; 17 BP.
XX
AC   AAF02930;
XX
DT   16-FEB-2001  (first entry)
XX
DE   Hammerhead ribozyme substrate #1225.
XX
KW   Ribozyme; erythropoietin; granulocyte colony stimulating factor;
KW   interferon alpha; ss.
XX
OS   Homo sapiens.
XX
PN   WO200061729-A2.
XX
PD   19-OCT-2000.
XX
PF   11-APR-2000; 2000WO-US09721.
XX
PR   12-APR-1999;   99US-0129390.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Blatt L,  Zwick M,  Pavco P,  McSwiggen J;
XX
DR   WPI; 2000-647423/62.
XX
PT   Enzymatic and antisense nucleic acid inhibition of repressor genes,
PT   useful for producing e.g. granulocyte colony stimulating factor
PT   protein, interferon alpha and erythropoietin -
XX
PS   Claim 37; Page 83; 164pp; English.
XX
CC   The present invention relates to enzymatic and antisense nucleic acid
CC   molecules that act as inhibitors of the expression of repressor genes
CC   encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA
CC   transcription factor gene, IRF-2 and/or the CAATT Displacement
CC   Protein (CDP). Inhibition of the repressors removes prevents
CC   inhibition (and consequently increases expression of) genes involved in
CC   the production of erythropoietin, granulocyte colony stimulating factor
CC   protein and interferon alpha.
XX
```

```
CC   comprises mixing the sample under stringent hybridisation conditions
CC   with a sequence-specific oligonucleotide probe that distinguishes the A',
CC   A'' or B' allele from A and B alleles, and detecting any hybridisation.
CC   The method and probes are used for determining an individual's
CC   Glycophorin A genotype, especially useful for determining individual
CC   identity for forensic purposes. AAT70558-67 (and also AAT70582-83) are
CC   primers from the AmpliType (R) PM kit used in a Glycophorin A typing
CC   system developed by Hoffmann-La Roche. The primers direct the
CC   simultaneous amplification of specific regions of the following six
CC   genetic loci: Glycophorin A, HLA DQA1, Low density lipoprotein receptor,
CC   Haemoglobin G gamma-globin, D7S8 and group specific component. Probe
CC   strips are also provided in the kit (AAT70568-81).
XX
SQ   Sequence 16 BP; 4 A; 9 C; 1 G; 2 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 16;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1698 GGTGGAAGTTGGGT 1711
              ||||||| |||||
Db         16 GGTGGAAGCTGGGT 3


RESULT 97
AAC67540
ID   AAC67540 standard; DNA; 16 BP.
XX
AC   AAC67540;
XX
DT   14-FEB-2001  (first entry)
XX
DE   Alzheimer's disease-linked mitochondrial SNP PCR primer #240.
XX
KW   Human; mitochondrial genome; single nucleotide polymorphism; SNP;
KW   Alzheimer's disease; mtDNA; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200063441-A2.
XX
PD   26-OCT-2000.
XX
PF   19-APR-2000; 2000WO-US10906.
XX
PR   20-APR-1999;   99US-0130447.
PR   22-OCT-1999;   99US-0160901.
XX
PA   (MITO-) MITOKOR.
XX
PI   Herrnstadt C,  Davis RE;
XX
DR   WPI; 2000-672748/65.
XX
PT   Diagnosing a subject at the risk for or having Alzheimer's disease
PT   comprises determining at least one single nucleotide polymorphism in
PT   mitochondrial DNA associated with the disease in the sample from the
PT   subject -
XX
PS   Example 9; Page 53; 89pp; English.
XX
CC   The present invention describes a novel method for determining the risk
CC   of or diagnosing Alzheimer's disease using single nucleotide
CC   polymorphisms (SNPs) present in an individual's mitochondrial DNA
CC   (mtDNA). In additon, the SNPs identified can be used to identify agents
CC   suitable for use in treating Alzheimer's disease. Sequences
CC   AAC67301-C67610 are PCR primers used to demonstrate the method of the
CC   invention.
XX
SQ   Sequence 16 BP; 2 A; 3 C; 8 G; 3 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 16;
  Best Local Similarity   92.9%;  Pred. No. 1.9e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1709 GGTTAGGAGTACGG 1722
              ||||||| ||||||
Db          3 GGTTAGGCGTACGG 16


RESULT 98
AAQ29806/c
ID   AAQ29806 standard; DNA; 17 BP.
XX
AC   AAQ29806;
XX
DT   25-MAR-2003  (updated)
DT   19-MAR-1993  (first entry)
XX
DE   B allele probe VP08.
XX
KW   G-gamma globulin; GGG; polymorphism; HindIII; A allele; B; C;
KW   genotype; paternity; forensic; ss.
XX
OS   Synthetic.
XX
PN   EP512342-A2.
XX
PD   11-NOV-1992.
XX
PF   25-APR-1992;   92EP-0107084.
XX
PR   07-MAY-1991;   91US-0696793.
XX
PA   (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI   Nasarabadi SL,  Saiki RK;
XX
DR   WPI; 1992-374679/46.
XX
PT   Determn. of an individuals genotype at the gamma-globin locus -
PT   using sequence-specific oligo-nucleotide probes corresp. to 3
PT   alleles
XX
PS   Disclosure; Page 17; 29pp; English.
XX
CC   The sequences given in AAQ29787-816 are probes which were used within
CC   the method of the invention for detecting the presence of a varient
CC   sequence in the G-gamma globulin (GGG) locus.  The A, B and C
CC   alleles can be distinguished from one another by the polymorphic
CC   sequence corresponding to the HindIII site of the A allele.  The
CC   sequences of the three alleles are given in AAQ29842-44.  The methods
CC   for determining an individuals genotype at the GGG locus with
CC   respect to a set of alleles improves the discriminatory power of GGG
CC   typing methodology compared to previous methods using two alleles.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 17 BP; 4 A; 10 C; 1 G; 2 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 17;
  Best Local Similarity   92.9%;  Pred. No. 2.1e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1698 GGTGGAAGTTGGGT 1711
              ||||||| |||||
Db         17 GGTGGAAGCTGGGT 4


RESULT 99
AAT14821
ID   AAT14821 standard; DNA; 17 BP.
XX
AC   AAT14821;
XX
DT   17-SEP-1996  (first entry)
XX
```

DE PCR primer for amplifying chi-A gene sequence.
XX
KW Anthocyanidin-3-glucoside rhamnosyltransferase;
KW glucosyltransferase; inflorescence; flowering plants;
KW transgenic plant; Petunia hybrida; chi-A; ss.
XX
OS Synthetic.
XX
PN WO9403591-A1.
XX
PD 17-FEB-1994.
XX
PF 30-JUL-1993; 93WO-AU00387.
XX
PR 30-JUL-1992; 92AU-0003846.
XX
PA (ITFL-) INT FLOWER DEV PTY LTD.
XX
PI Brugliera F, Holton TA;
XX
DR WPI; 1994-065680/08.
XX
PT Nucleic acid encoding glycosyltransferase enzymes - used for
PT producing transgenic plants with altered inflorescence properties
PT including modified petal colours
XX
PS Example 17; Page 21; 76pp; English.
XX
CC Two primers (AAQ56245, AAQ56246) were used to amplify the chi-A gene.
CC This primer corresponds to nucleotides 6-20 of the published chi-A
CC cDNA sequence. chi-A is a previously characterised flavonoid
CC biosynthesis gene.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 other;

Query Match 8.9%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 1.7e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1683 TGTCTCCTCCAGCG 1696
||||||||||| |
Db 2 TGTCTCCTCCAGTG 15

RESULT 95
AAQ29808/c
ID AAQ29808 standard; DNA; 16 BP.
XX
AC AAQ29808;
XX
DT 25-MAR-2003 (updated)
DT 19-MAR-1993 (first entry)
XX
DE B allele probe VP59.
XX
KW G-gamma globulin; GGG; polymorphism; HindIII; A allele; B; C;
KW genotype; paternity; forensic; ss.
XX
OS Synthetic.
XX
PN EP512342-A2.
XX
PD 11-NOV-1992.
XX
PF 25-APR-1992; 92EP-0107084.
XX
PR 07-MAY-1991; 91US-0696793.
XX
PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI Nasarabadi SL, Saiki RK;
XX
DR WPI; 1992-374679/46.
XX
PT Determn. of an individuals genotype at the gamma-globin locus -
PT using sequence-specific oligo-nucleotide probes corresp. to 3
PT alleles
XX
PS Disclosure; Page 18; 29pp; English.
XX
CC The sequences given in AAQ29787-816 are probes which were used within
CC the method of the invention for detecting the presence of a varient
CC sequence in the G-gamma globulin (GGG) locus. The A, B and C
CC alleles can be distinguished from one another by the polymorphic
CC sequence corresponding to the HindIII site of the A allele. The
CC sequences of the three alleles are given in AAQ29842-44. The methods
CC for determining an individuals genotype at the GGG locus with
CC respect to a set of alleles improves the discriminatory power of GGG
CC typing methodology compared to previous methods using two alleles.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 16 BP; 4 A; 9 C; 1 G; 2 T; 0 other;

Query Match 8.9%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. No. 1.9e+02;
Matches 13; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1698 GGTGGAAGTTGGGT 1711
|||||||| |||||
Db 16 GGTGGAAGCTGGGT 3

RESULT 96
AAT70569/c
ID AAT70569 standard; DNA; 16 BP.
XX
AC AAT70569;
XX
DT 04-NOV-1997 (first entry)
XX
DE Haemoglobin G gamma-globin allele B-specific probe.
XX
KW Glycophorin A; sialoglycoprotein; human; erthryocyte; membrane;
KW M blood group antigen; N blood group antigen; allele A; B; A'; A''; B';
KW polymorphism; detection; sequence-specific oligonucleotide probe;
KW genotype; forensic; primer; PCR; polymerase chain reaction; amplify; ss.
XX
OS Synthetic.
XX
PN US5643724-A.
XX
PD 01-JUL-1997.
XX
PF 06-JUN-1994; 94US-0255264.
XX
PR 06-JUN-1994; 94US-0255264.
XX
PA (HOFF ) ROCHE MOLECULAR SYSTEMS INC.
XX
PI Fildes NJ, Reynolds RL;
XX
DR WPI; 1997-350231/32.
XX
PT Detection of glycophorin A allele(s) - by hybridisation assay using
PT sequence-specific oligo:nucleotide probes
XX
PS Example 3; Column 15-16; 16pp; English.
XX
CC Glycophorin A is a major sialoglycoprotein of the human erthryocyte
CC membrane. Glycophorin A carries the M or N blood group antigen, which is
CC determined by the amino acid at residues 1 and 5. Allele A encodes the
CC protein carrying the M blood group antigen and allele B encodes the
CC protein carrying the N blood group antigen. Three additional alleles
CC have been discovered, designated A', A'' and B'. Detecting an A', A'' or
CC B' allele of the Glycophorin A locus in a human nucleic acid sample

```
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 0 C; 6 G; 2 T; 1 other;

  Query Match             9.1%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
              |||||||||||:
Db          1 GGAGATGGAGATY 13


RESULT 92
ABF35839/c
ID   ABF35839 standard; DNA; 13 BP.
XX
AC   ABF35839;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 135836 for detecting SNP TSC0033923.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 135836; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 6 C; 0 G; 4 T; 1 other;

  Query Match             9.1%;  Score 12.6;  DB 1;  Length 13;
  Best Local Similarity   92.3%;  Pred. No. 1.2e+02;
  Matches   12;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1721 GGAGATGGAGATT 1733
              |||||||||||:
Db          13 GGAGATGGAGATY 1


RESULT 93
AAQ34483
ID   AAQ34483 standard; DNA; 15 BP.
XX
AC   AAQ34483;
XX
DT   25-MAR-2003  (updated)
DT   12-MAY-1993  (first entry)
XX
DE   Oligo 9, a PCR primer for plant DHK-hydroxylating enzyme clone.
XX
KW   Dihydrokaempferol; flavonoid; pigmentation; colour; amplification;
KW   cytochrome P450; ss.
XX
OS   Synthetic.
XX
PN   EP522880-A2.
XX
PD   13-JAN-1993.
XX
PF   10-JUL-1992;   92EP-0306379.
XX
PR   11-JUL-1991;   91AU-0007173.
PR   17-FEB-1992;   92AU-0000923.
XX
PA   (ITFL-) INT FLOWER DEV PTY LTD.
XX
PI   Cornish EC,  Holton TA,  Kovacic F,  Lester DR,  Tanaka Y;
XX
DR   WPI; 1993-010698/02.
XX
PT   Nucleic acid sequence encoding a di:hydro:kaempferol-hydroxylating
PT   enzyme - e.g. cytochrome P450 introduced into transgenic plants for
PT   controlling flavonoid pigmentation in plants and organisms
XX
PS   Disclosure; Page 13; 66pp; English.
XX
CC   The PCR primer may be used in PCR for amplification of
CC   petal cytochrome P450 homologues.
CC   See also AAQ34475-91.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 15 BP; 2 A; 5 C; 3 G; 5 T; 0 other;

  Query Match             8.9%;  Score 12.4;  DB 1;  Length 15;
  Best Local Similarity   92.9%;  Pred. No. 1.7e+02;
  Matches   13;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1683 TGTCTCCTCCAGCG 1696
              ||||||||||||| |
Db          2 TGTCTCCTCCAGTG 15


RESULT 94
AAQ56245
ID   AAQ56245 standard; cDNA; 15 BP.
XX
AC   AAQ56245;
XX
DT   25-MAR-2003  (updated)
DT   08-AUG-1994  (first entry)
XX
```

XX
PN US6107092-A.
XX
PD 22-AUG-2000.
XX
PF 29-MAR-1999; 99US-0280409.
XX
PR 29-MAR-1999; 99US-0280409.
XX
PA (ISIS-) ISIS PHARM INC.
PA (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI Cowsert LM, Bennett CF, O'Malley BW;
XX
DR WPI; 2000-586211/55.
XX
PT Antisense compounds targeted to steroid receptor RNA activator useful
PT for diagnosis, prophylaxis and treatment of diseases associated with
PT the steroid activator, such as infection, inflammation or tumor
PT formation -
XX
PS Claim 3; Column 42; 47pp; English.
XX
CC The present sequence is one of a large number of antisense
CC oligonucleotides which is directed against one of four human steroid
CC receptor RNA activator (SRA) nucleic acid sequences. Two series of
CC antisense oligonucleotides were synthesised. The first series comprised
CC 8-30 oligodeoxynucleotides with a phosphorothioate backbone. The second
CC series comprised chimeric oligonucleotides composed of a central gap
CC region, consisting of ten 2'-deoxynucleotides, which was flanked on both
CC sides by four-nucleotide wings. The wings were composed of
CC 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same
CC nucleotide sequences. The antisense compounds are useful for research,
CC diagnosis, treatment and prophylaxis to prevent or delay infection,
CC inflammation or tumour formation. Therapeutically the oligonucleotides
CC are highly safe and are effectively administered to humans.
XX
SQ Sequence 18 BP; 3 A; 3 C; 7 G; 5 T; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1670 GCTGGAACCCTGGTGT 1685
|||||||.|||||.|
Db 2 GCTGGAAGCCTGGTAT 17

RESULT 90
AAA92642
ID AAA92642 standard; DNA; 18 BP.
XX
AC AAA92642;
XX
DT 04-JAN-2001 (first entry)
XX
DE Antisense oligonucleotide ISIS# 30365.
XX
KW Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
KW SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
OS Synthetic.
XX
PN US6107092-A.
XX
PD 22-AUG-2000.
XX
PF 29-MAR-1999; 99US-0280409.
XX
PR 29-MAR-1999; 99US-0280409.
XX
PA (ISIS-) ISIS PHARM INC.
PA (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI Cowsert LM, Bennett CF, O'Malley BW;
XX
DR WPI; 2000-586211/55.
XX
PT Antisense compounds targeted to steroid receptor RNA activator useful
PT for diagnosis, prophylaxis and treatment of diseases associated with
PT the steroid activator, such as infection, inflammation or tumor
PT formation -
XX
PS Claim 3; Column 42; 47pp; English.
XX
CC The present sequence is one of a large number of antisense
CC oligonucleotides which is directed against one of four human steroid
CC receptor RNA activator (SRA) nucleic acid sequences. Two series of
CC antisense oligonucleotides were synthesised. The first series comprised
CC 8-30 oligodeoxynucleotides with a phosphorothioate backbone. The second
CC series comprised chimeric oligonucleotides composed of a central gap
CC region, consisting of ten 2'-deoxynucleotides, which was flanked on both
CC sides by four-nucleotide wings. The wings were composed of
CC 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same
CC nucleotide sequences. The antisense compounds are useful for research,
CC diagnosis, treatment and prophylaxis to prevent or delay infection,
CC inflammation or tumour formation. Therapeutically the oligonucleotides
CC are highly safe and are effectively administered to humans.
XX
SQ Sequence 18 BP; 3 A; 5 C; 6 G; 4 T; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 2e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1668 CAGCTGGAACCCTGGT 1683
| |||||||.||||||
Db 2 CTGCTGGAAGCCTGGT 17

RESULT 91
ABF35838
ID ABF35838 standard; DNA; 13 BP.
XX
AC ABF35838;
XX
DT 21-FEB-2002 (first entry)
XX
DE Oligonucleotide SEQ ID NO 135835 for detecting SNP TSC0033923.
XX
KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS Homo sapiens.
XX
PN WO200177384-A2.
XX
PD 18-OCT-2001.
XX
PF 06-APR-2001; 2001WO-IB00713.
XX
PR 07-APR-2000; 2000DE-1019173.
XX
PA (EPIG-) EPIGENOMICS AG.
XX
PI Olek A, Piepenbrock C, Berlin K;
XX
DR WPI; 2001-657177/75.
XX
PT Set of oligonucleotides, useful for diagnosis and cell typing, is
PT designed to detect single nucleotide polymorphisms and cytosine
PT methylation status -
XX
PS Claim 1; SEQ ID 135835; 29pp + Sequence Listing; German.
XX

```
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "DyTx-NH(CH2)6-PO4-thymine"
XX
PN   WO9429316-A2.
XX
PD   22-DEC-1994.
XX
PF   09-JUN-1994;   94WO-US06284.
XX
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Hemmi GW,  Iverson B,  Kral VA,  Magda D;
PI   Miller RA,  Mody T, Ross KL,  Sessler JL,  Smith DA;
PI   Wright M;
XX
DR   WPI; 1995-036382/05.
XX
PT   Texaphyrin metal complex mediated ester hydrolysis - esp. useful
PT   for targeted intracellular hydrolysis of mRNA and for inhibiting
PT   gene expression
XX
PS   Disclosure; Fig 21; 125pp; English.
XX
CC   AAQ91451-Q91457 are texaphyrin lanthanide metal DNA conjugates, which
CC   are esp. useful for the targeted intracellular hydrolysis of mRNA;
CC   inhibiting gene expression. They may also be used for the treament
CC   of liver disease, as hormone regulation agents and as hydrolysis
CC   reagents for the detoxification of alkyl phosphate esters.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 other;

  Query Match             9.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAG 1670
              | |||| |||||||||
Db         17 AACACCCGGCTCACAG 2


RESULT 88
AAV07301/c
ID   AAV07301 standard; DNA; 18 BP.
XX
AC   AAV07301;
XX
DT   14-AUG-1998  (first entry)
XX
DE   Metallotexaphyrin-oligonucleotide conjugate #15.
XX
KW   Metallotexapyrin; dysprosium; europium; conjugate; RNase H;
KW   antisense therapy; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base=
FT                   /note= "DyTxNH-(CH2)6-PO4-thymine, where DyTx is
FT                          dysprosium (III) texaphyrin"
XX
PN   US5763172-A.
XX
PD   09-JUN-1998.
XX
PF   07-JUN-1995;   95US-0486962.
XX
PR   07-JUN-1995;   95US-0485581.
PR   21-JAN-1992;   92US-0822964.
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
PR   09-JUN-1994;   94WO-US06284.
PR   26-MAY-1995;   95US-0452261.
PR   07-JUN-1995;   95US-0486962.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Magda D,  Miller RA,  Sessler JL,  Wright M;
XX
DR   WPI; 1998-347306/30.
XX
PT   Enhancing therapeutic activity of oligonucleotides in cells - using
PT   conjugate comprising metallotexaphyrin, which hydrolyses phosphate
PT   ester bonds of RNA, and oligo-nucleotide, which binds to targetted
PT   RNA
XX
PS   Example 6; Figure 5; 34pp; English.
XX
CC   The invention relates to a method of enhancing the therapeutic activity
CC   of oligonucleotides in cells. It comprises contacting a targeted
CC   intracellular RNA in a cell with a metallotexaphyrin-oligonucleotide
CC   conjugate. The contact is carried out under physiological conditions for
CC   a time sufficient to hydrolyse the phosphate ester bond of the targeted
CC   RNA. The metallotexaphyrin of the conjugate has catalytic activity for
CC   phosphate ester bond hydrolysis. The oligonucleotide of the conjugate
CC   has complementary binding affinity to the targeted RNA. The conjugate
CC   may be used in antisense therapies for treating, e.g. cancer, viral
CC   infections, autoimmune diseases and restenosis. The conjugate may also
CC   be used as hydrolysis reagents for the detoxification of di- and
CC   trialkyl phosphate esters, which are used in solvents, insecticides and
CC   chemical nerve gases. The metallotexaphyrin complex enhances the
CC   therapeutic activity of the oligonucleotide, not only by facilitating
CC   cellular uptake of the oligonucleotide but also by hydrolysing target
CC   RNA within the cell, independent of RNase H. Attachment to the complex
CC   may also cause the oligonucleotide to take on some of the pharmacodynamic
CC   an biodistribution properties of the texaphyrin, such as selective
CC   localisation in tumours. The present sequence represents a metallo-
CC   texaphyrin-oligonucleotide conjugate.
XX
SQ   Sequence 18 BP; 1 A; 3 C; 8 G; 6 T; 0 other;

  Query Match             9.2%;  Score 12.8;  DB 1;  Length 18;
  Best Local Similarity   87.5%;  Pred. No. 2e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAG 1670
              | |||| |||||||||
Db         17 AACACCCGGCTCACAG 2


RESULT 89
AAA92609
ID   AAA92609 standard; DNA; 18 BP.
XX
AC   AAA92609;
XX
DT   04-JAN-2001  (first entry)
XX
DE   Antisense oligonucleotide ISIS# 30428.
XX
KW   Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
KW   SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
OS   Synthetic.
```

KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US15866.
XX
PR 16-MAY-2000; 2000US-0572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX ) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, McSwiggen JA, Mclaughlin F, Randi AM;
XX
DR WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related
PT gene, useful for treating cancer, diabetic retinopathy, macular
PT degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber
PT syndrome -
XX
PS Claim 4; Page 84; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention.
XX
SQ Sequence 17 BP; 4 A; 3 C; 7 G; 3 U; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1674 GAACCCTGGTGTCTCC 1689
||||||| | ||||||
Db 16 GAACCCTCGAGTCTCC 1

RESULT 86
ABL31561/c
ID ABL31561 standard; DNA; 17 BP.
XX
AC ABL31561;
XX
DT 21-MAR-2002 (first entry)
XX
DE Human HLA genotyping oligonucleotide SEQ ID NO 1050.
XX
KW Human; human leukocyte antigen; HLA; genotype; polymorphism;
KW immunogenetic; transplantation; genetic disease; ss.
XX
OS Homo sapiens.
XX
PN WO200192572-A1.
XX
PD 06-DEC-2001.
XX
PF 01-JUN-2001; 2001WO-JP04662.
XX
PR 01-JUN-2000; 2000JP-0164798.
XX
PA (NISN ) NISSHINBO IND INC.
PA (SYST-) SYSTEM RES INC.
XX
PI Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
XX
DR WPI; 2002-122074/16.
XX
PT Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes
PT of individuals e.g. by determining immunogenetic differences when
PT transplanting between them -
XX
PS Claim 10; Page 292; 345pp; Japanese.
XX
CC The invention relates to a typing kit for judging human leukocyte antigen
CC (HLA) genotype of a sample by hybridising a substrate on which 10-24 base
CC oligonucleotides (ABL30512-ABL31809) originating in the sequences of
CC genes e.g. belonging to HLA class I antigens on human genome and
CC containing gene polymorphisms as alloantigens have been immobilised as
CC primers for amplification of cleaved nucleic acids relating to gene
CC polymorphisms. The method is useful for judging HLA genotypes of
CC individuals by determining immunogenetic differences before transplanting
CC between them, providing genetic information to decide compatibility of
CC organ and tissue for transplantation e.g. of bone marrow, kidney, liver,
CC pancreas, Langerhans islet in pancreas and cornea, susceptibility
CC diagnosis of genetic diseases and identifying individuals.
XX
SQ Sequence 17 BP; 4 A; 3 C; 7 G; 3 T; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1734 GGCTCCCAACTCCTCC 1749
||||| ||||| ||||
Db 16 GGCTCTCAACTGCTCC 1

RESULT 87
AAQ91453/c
ID AAQ91453 standard; DNA; 18 BP.
XX
AC AAQ91453;
XX
DT 25-MAR-2003 (updated)
DT 30-AUG-1995 (first entry)
XX
DE Dysprosium (III) texaphyrin (DyTx) DNA conjugate.
XX
KW Dysprosium (III) texaphyrin (DyTx) DNA conjugate; liver disease;
KW targeted intracellular mRNA hydrolysis; gene expression inhibition;
KW hormone regulation; hydrolysis reagents; alkyl phosphate esters;
KW detoxification; ss.
XX

PT responsible for disorder-related traits -
XX
PS Example 21; Page 138; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase
CC activating protein (FLAP), glutathione-S-transferase 12 (GST12),
CC histamine-N-methyl transferase (HNMT), (kallikrein 2) KLK2, nicotinamide
CC -N-methyl transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance
CC 1 (MDR1), lactotransferrin (LTF), multidrug resistance associated
CC protein 3 (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine
CC muscarinic receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or
CC CHMR5) sequence. The polymorphisms in the human genes cited in the
CC invention are useful as genetic linkage markers for locating and
CC characterising the genes that are responsible for specific traits within
CC the genome and eventually identifying the genes responsible for a
CC variety of disorder-related traits as a result of their e.g.,
CC overexpression, constitutive expression, mutation or underexpression,
CC which may be used in diagnosing and/or treating the disorders. The
CC nucleic acid molecules comprising the polymorphic sequences contained
CC in CYP4501A1, CYPP4501A2, CYP4502E1, ARNT, EPHX2, GST12, NNMT, NQO2,
CC NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 are useful
CC for screening individuals for altered drug metabolism. The polymorphic
CC sequences contained in CYP4501A1, CYPP4501A2, AHR, MDR1 and/or MDR3 may
CC also be used to screen individuals for susceptibility to cancer.
CC Polymorphic sequences in ADRB1 or CHMR2 are used to screen for altered
CC cardiovascular function, in COX2 for altered susceptibility to
CC colorectal tumours, in DBI or CHMR1 for altered central nervous system
CC function, in FLAP and HNMT for altered pulmonary, immunological or
CC haematological function, in KLK2 for altered serine protease activity in
CC the prostate, in LTF for altered immunological or haematological
CC function, in CHMR3, CHMR4 or CHMR5 for altered central and peripheral
CC nervous system function. The present sequence represents a PCR
CC primer used to amplify the sequences of the invention.
XX
SQ Sequence 17 BP; 5 A; 5 C; 4 G; 3 T; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1670 GCTGGAACCCTGGTGT 1685
||||||||| |||| |
Db 17 GCTGGAACCATGGTCT 2

RESULT 84
ABK17683/c
ID ABK17683 standard; RNA; 17 BP.
XX
AC ABK17683;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG hammerhead ribozyme target sequence, Seq ID No 330.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;
KW ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic;
KW vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis;
KW tumour angiogenesis; diabetic retinopathy; macular degeneration;
KW neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris;
KW angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
KW Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
KW Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme;
KW amberzyme.
XX
OS Homo sapiens.
XX
PN WO200188124-A2.
XX
PD 22-NOV-2001.
XX
PF 16-MAY-2001; 2001WO-US15866.
XX
PR 16-MAY-2000; 2000US-0572021.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (GLAX ) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, McSwiggen JA, Mclaughlin F, Randi AM;
XX
DR WPI; 2002-082995/11.
XX
PT Novel polynucleotide which down regulates expression of Ets-related
PT gene, useful for treating cancer, diabetic retinopathy, macular
PT degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber
PT syndrome -
XX
PS Claim 4; Page 64; 149pp; English.
XX
CC The invention relates to a nucleic acid molecule (I) which down regulates
CC expression of an Ets-related gene (ERG). (I) is useful for treating
CC conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma,
CC tumour angiogenesis, diabetic retinopathy, macular degeneration,
CC neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca
CC vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge
CC Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu
CC syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for
CC treating a patient having a condition associated with the level of ERG,
CC by contacting cells of the patient with (I) under conditions suitable for
CC the treatment. The method comprises the use of one or more therapies
CC under conditions suitable for the treatment. Leukaemia or tumour
CC angiogenesis is treated by administering (I) to the patient in
CC conjunction with one or more of other therapies such as radiation or
CC chemotherapy treatment. (I) is useful for reducing ERG activity in a
CC cell, by contacting the cell with (I). (I) is useful for cleaving RNA of
CC ERG gene, by contacting (I) with RNA, in the presence of a divalent
CC cation such as Mg2+. (I) is useful for diagnosis of conditions and
CC diseases related to the expression of ERG, and as diagnostic tool to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of ERG RNA in a cell. (I) is useful for specifically
CC targeting genes that share homology with ERG gene or ERG fusion genes.
CC ABK17354-ABK22719 represent nucleic acids, including antisense and
CC enzymatic nucleic acid molecules which regulate expression of ERG, and
CC related PCR primers of the invention.
XX
SQ Sequence 17 BP; 3 A; 3 C; 7 G; 4 U; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1674 GAACCCTGGTGTCTCC 1689
||||||| | ||||||
Db 17 GAACCCTCGAGTCTCC 2

RESULT 85
ABK18660/c
ID ABK18660 standard; RNA; 17 BP.
XX
AC ABK18660;
XX
DT 09-APR-2002 (first entry)
XX
DE Human ERG G-cleaver ribozyme target sequence Seq ID No 1307.
XX
KW Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic;

PI Parry T, Reynolds M, Sweedler D, Thompson J, Workman CT;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected
PT processes - especially ribozymes that cleave Raf RNA for treating
PT cancer, restenosis, and also new ribozymes and modified nucleoside
PT triphosphates used as antiviral agents and synthons
XX
PS Claim 177; Page 147; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules
CC with endonuclease activity and catalytic activity, from the present
CC invention, are used to modulate gene expression in plant and mammalian
CC cells and to cleave target nucleic acid, particularly for treating
CC systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC psoriasis, non-hepatic ascites and infection. They may also be used to
CC detect genetic drift and mutations in diseased cells and to determine
CC c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC expression of the Raf gene, are used to treat cancer, restenosis,
CC psoriasis or rheumatoid arthritis, or generally any condition associated
CC with the level of c-raf. Introduction of sugar/phosphate modifications
CC increases stability against nuclease and activity. AAV90922 to AAV93877
CC represent NACs that can be used in the method, specifically for
CC modulating the expression of a Raf gene.
XX
SQ Sequence 17 BP; 2 A; 5 C; 3 G; 7 U; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1641 TGTAGCAGAAGGCAAG 1656
                ||| |||||||||||
Db         16 TGTCACAGAAGGCAAG 1
```

RESULT 82
AAA79844
ID AAA79844 standard; DNA; 17 BP.
XX
AC AAA79844;
XX
DT 20-NOV-2000 (first entry)
XX
DE Hepatitis B virus related oligonucleotide probe #107.
XX
KW Hepatitis B virus; HBV; Hepatitis A virus; HAV; probe; detection;
KW mutation; high-density gene chip; ss.
XX
OS Hepatitis B virus.
XX
PN CN1252452-A.
XX
PD 10-MAY-2000.
XX
PF 24-SEP-1999; 99CN-0114460.
XX
PR 24-SEP-1999; 99CN-0114460.
XX
PA (UYDO-) UNIV DONGNAN.
XX
PI Sun X, Lu Z, Wang Y;
XX
DR WPI; 2000-443233/39.
XX
PT High-density gene chip making process -
XX
PS Example 1; Fig 15; 19pp; Chinese.
XX
CC The present invention describes a method which comprises making a high-
CC density gene chip, specifically for making high-density micro-array of
CC oligonucleotide probes. An oligonucleotide probe selecting process to
CC seek preferentially length variable and coverage variable probes is
CC provided to ensure identical cross melting temperature of probes to the
CC maximum limit, and this can make the cross control of gene chip
CC relatively simple and raise the reliability of the gene chip detecting
CC results. The process proposes a specific probe selection method for
CC detecting target sequence directly, detecting mutation in both specific
CC and non-specific sites and a probe overall arrangement scheme. AAA79738
CC to AAA80201 represent oligonucleotide probe sequences which are used in
CC examples from the present invention.
XX
SQ Sequence 17 BP; 4 A; 1 C; 10 G; 2 T; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1713 AGGAGTACGGAGATGG 1728
                |||||  ||||||  |||
Db          1 AGGAGGACGGAGGTGG 16
```

RESULT 83
ABS97987/c
ID ABS97987 standard; DNA; 17 BP.
XX
AC ABS97987;
XX
DT 23-DEC-2002 (first entry)
XX
DE Human urokinase gene (uPA) PCR primer #2.
XX
KW Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR;
KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADBR1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxgenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile;
KW STM; UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological.
XX
OS Homo sapiens.
XX
PN WO200257410-A2.
XX
PD 25-JUL-2002.
XX
PF 28-NOV-2001; 2001WO-US44838.
XX
PR 28-NOV-2000; 2000US-0724389.
XX
PA (DNAS-) DNA SCI LAB INC.
XX
PI Guida M, Hall J;
XX
DR WPI; 2002-698522/75.
XX
PT Isolated nucleic acid molecules having polymorphisms in known human
PT genes e.g. cytochrome p450 and cathepsin S useful as genetic linkage
PT markers for locating, identifying and characterizing the genes

CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules
CC with endonuclease activity and catalytic activity, from the present
CC invention, are used to modulate gene expression in plant and mammalian
CC cells and to cleave target nucleic acid, particularly for treating
CC systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC psoriasis, non-hepatic ascites and infection. They may also be used to
CC detect genetic drift and mutations in diseased cells and to determine
CC c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC expression of the Raf gene, are used to treat cancer, restenosis,
CC psoriasis or rheumatoid arthritis, or generally any condition associated
CC with the level of c-raf. Introduction of sugar/phosphate modifications
CC increases stability against nuclease and activity. AAV90922 to AAV93877
CC represent NACs that can be used in the method, specifically for
CC modulating the expression of a Raf gene.
XX
SQ Sequence 17 BP; 1 A; 6 C; 5 G; 5 U; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1667 ACAGCTGGAACCCTGG 1682
              ||||| | ||||||||
Db         16 ACAGCGGAAACCCTGG 1
```

RESULT 80
AAV93413/c
ID AAV93413 standard; RNA; 17 BP.
XX
AC AAV93413;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human B-raf substrate nucleotide position 833.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene;
KW delivery; screening; identification; synthesis; deprotection;
KW purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US09249.
XX
PR 19-DEC-1997; 97US-0068212.
PR 09-MAY-1997; 97US-0046059.
PR 09-JUN-1997; 97US-0049002.
PR 03-JUL-1997; 97US-0051718.
PR 22-AUG-1997; 97US-0056808.
PR 02-OCT-1997; 97US-0061321.
PR 02-OCT-1997; 97US-0061324.
PR 05-NOV-1997; 97US-0064866.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beaudry A, Beigelman L, Bellon L, Burgin A, Jarvis T;
PI Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Parry T, Reynolds M, Sweedler D, Thompson J, Workman CT;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected
PT processes - especially ribozymes that cleave Raf RNA for treating
PT cancer, restenosis, and also new ribozymes and modified nucleoside
PT triphosphates used as antiviral agents and synthons
XX
PS Claim 177; Page 167; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules
CC with endonuclease activity and catalytic activity, from the present
CC invention, are used to modulate gene expression in plant and mammalian
CC cells and to cleave target nucleic acid, particularly for treating
CC systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC psoriasis, non-hepatic ascites and infection. They may also be used to
CC detect genetic drift and mutations in diseased cells and to determine
CC c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC expression of the Raf gene, are used to treat cancer, restenosis,
CC psoriasis or rheumatoid arthritis, or generally any condition associated
CC with the level of c-raf. Introduction of sugar/phosphate modifications
CC increases stability against nuclease and activity. AAV90922 to AAV93877
CC represent NACs that can be used in the method, specifically for
CC modulating the expression of a Raf gene.
XX
SQ Sequence 17 BP; 1 A; 5 C; 5 G; 6 U; 0 other;

Query Match 9.2%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 1.8e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy       1667 ACAGCTGGAACCCTGG 1682
              ||||| | ||||||||
Db         17 ACAGCGGAAACCCTGG 2
```

RESULT 81
AAV91007/c
ID AAV91007 standard; RNA; 17 BP.
XX
AC AAV91007;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human C-raf target site nucleotide position 582.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene;
KW delivery; screening; identification; synthesis; deprotection;
KW purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US09249.
XX
PR 19-DEC-1997; 97US-0068212.
PR 09-MAY-1997; 97US-0046059.
PR 09-JUN-1997; 97US-0049002.
PR 03-JUL-1997; 97US-0051718.
PR 22-AUG-1997; 97US-0056808.
PR 02-OCT-1997; 97US-0061321.
PR 02-OCT-1997; 97US-0061324.
PR 05-NOV-1997; 97US-0064866.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beaudry A, Beigelman L, Bellon L, Burgin A, Jarvis T;
PI Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;

```
CC   of nucleic acid molecules from the present invention.
XX
SQ   Sequence 17 BP; 0 A; 4 C; 7 G; 6 U; 0 other;

  Query Match             9.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1646 CAGAAGGCAAGCACCA 1661
              |||||| ||||| |||
Db         17 CAGAAGCCAAGCGCCA 2


RESULT 78
AAV07298/c
ID   AAV07298 standard; DNA; 17 BP.
XX
AC   AAV07298;
XX
DT   14-AUG-1998  (first entry)
XX
DE   Metallotexaphyrin-oligonucleotide conjugate #12.
XX
KW   Metallotexapyrin; dysprosium; europium; conjugate; RNase H;
KW   antisense therapy; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1
FT                    /*tag=  a
FT                    /mod_base=
FT                    /note= "DyTxNH-(CH2)6-PO4-cytosine, where DyTx is
FT                           dysprosium (III) texaphyrin"
XX
PN   US5763172-A.
XX
PD   09-JUN-1998.
XX
PF   07-JUN-1995;   95US-0486962.
XX
PR   07-JUN-1995;   95US-0485581.
PR   21-JAN-1992;   92US-0822964.
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
PR   09-JUN-1994;   94WO-US06284.
PR   26-MAY-1995;   95US-0452261.
PR   07-JUN-1995;   95US-0486962.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Magda D,  Miller RA,  Sessler JL,  Wright M;
XX
DR   WPI; 1998-347306/30.
XX
PT   Enhancing therapeutic activity of oligonucleotides in cells - using
PT   conjugate comprising metallotexaphyrin, which hydrolyses phosphate
PT   ester bonds of RNA, and oligo-nucleotide, which binds to targetted
PT   RNA
XX
PS   Example 6; Figure 5; 34pp; English.
XX
CC   The invention relates to a method of enhancing the therapeutic activity
CC   of oligonucleotides in cells. It comprises contacting a targeted
CC   intracellular RNA in a cell with a metallotexaphyrin-oligonucleotide
CC   conjugate. The contact is carried out under physiological conditions for
CC   a time sufficient to hydrolyse the phosphate ester bond of the targeted
CC   RNA. The metallotexaphyrin of the conjugate has catalytic activity for
CC   phosphate ester bond hydrolysis. The oligonucleotide of the conjugate
CC   has complementary binding affinity to the targeted RNA. The conjugate
CC   may be used in antisense therapies for treating, e.g. cancer, viral
CC   infections, autoimmune diseases and restenosis. The conjugate may also
CC   be used as hydrolysis reagents for the detoxification of di- and
CC   trialkyl phosphate esters, which are used in solvents, insecticides and
CC   chemical nerve gases. The metallotexaphyrin complex enhances the
CC   therapeutic activity of the oligonucleotide, not only by facilitating
CC   cellular uptake of the oligonucleotide but also by hydrolysing target
CC   RNA within the cell, independent of RNase H. Attachment to the complex
CC   may also cause the oligonucleotide to take on some of the pharmacodynamic
CC   an biodistribution properties of the texaphyrin, such as selective
CC   localisation in tumours. The present sequence represents a metallo-
CC   texaphyrin-oligonucleotide conjugate.
XX
SQ   Sequence 17 BP; 1 A; 3 C; 8 G; 5 T; 0 other;

  Query Match             9.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAG 1670
              | |||| ||||||||
Db         16 AACACCCGGCTCACAG 1


RESULT 79
AAV93414/c
ID   AAV93414 standard; RNA; 17 BP.
XX
AC   AAV93414;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human B-raf substrate nucleotide position 834.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene;
KW   delivery; screening; identification; synthesis; deprotection;
KW   purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW   infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
XX
PF   05-MAY-1998;   98WO-US09249.
XX
PR   19-DEC-1997;   97US-0068212.
PR   09-MAY-1997;   97US-0046059.
PR   09-JUN-1997;   97US-0049002.
PR   03-JUL-1997;   97US-0051718.
PR   22-AUG-1997;   97US-0056808.
PR   02-OCT-1997;   97US-0061321.
PR   02-OCT-1997;   97US-0061324.
PR   05-NOV-1997;   97US-0064866.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Beaudry A,  Beigelman L,  Bellon L,  Burgin A,  Jarvis T;
PI   Karpeisky A,  Kisich K,  Matulic-Adamic J,  McSwiggen JA;
PI   Parry T,  Reynolds M,  Sweedler D,  Thompson J,  Workman CT;
XX
DR   WPI; 1999-009494/01.
XX
PT   Identifying new catalytic nucleic acid that modulates selected
PT   processes - especially ribozymes that cleave Raf RNA for treating
PT   cancer, restenosis, and also new ribozymes and modified nucleoside
PT   triphosphates used as antiviral agents and synthons
XX
PS   Claim 177; Page 167; 259pp; English.
XX
CC   A method has been developed for the identification of a nucleic acid
CC   capable of modulating a process in a biological system. The method
CC   comprises: (a) introducing into the system a random library of nucleic
```

```
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme then binds to 5 nucleotides either side of this site.  The
CC   ribozymes are able to cleave mRNA from the gene encoding CETP, thereby
CC   blocking synthesis and/or expression of the mRNA.  By inhibiting CETP,
CC   the reverse cholesterol transport (RCT) pathway can be inhibited (or
CC   eliminated) thereby preventing the reduction in size density of the high
CC   density lipoproteins (HDL), prolonging HDL half life, and therefore
CC   increasing HDL levels.  The ribozymes can be used to treat conditions
CC   associated with abnormal levels of CETP, specifically atherosclerosis,
CC   familial hypercholesterolaemia, peripheral vascular disease,
CC   dyslipidaemia, hyperbetalipoproteinaemia, hypoalphalipoproteinaemia,
CC   vascular complications of diabetes, transplant, atherectomy and
CC   angioplastic restenosis.  By inhibiting CETP, the levels of HDL and low
CC   density lipoproteins (LDL), and the HDL:LDL ratio are favourably altered
CC   (a decrease in LDL levels, and a corresponding increase in HDL levels).
CC   The HH ribozymes can also be used diagnostically to study genetic drift
CC   and mutations in diseased cells, and to detect CETP mRNA.  As the HH
CC   ribozymes target specific regions of the CETP gene, they have low
CC   non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 6 C; 3 G; 3 U; 0 other;

  Query Match              9.4%;  Score 13;  DB 1;  Length 15;
  Best Local Similarity   76.9%;  Pred. No. 1.3e+02;
  Matches   10;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1733 TGGCTCCCAACTC 1745
              :|||:||||||:|
Db          3 UGGCUCCCAACUC 15


RESULT 76
AAQ91452/c
ID   AAQ91452 standard; DNA; 17 BP.
XX
AC   AAQ91452;
XX
DT   25-MAR-2003  (updated)
DT   30-AUG-1995  (first entry)
XX
DE   Dysprosium (III) texaphyrin (DyTx) DNA conjugate.
XX
KW   Dysprosium (III) texaphyrin (DyTx) DNA conjugate; liver disease;
KW   targeted intracellular mRNA hydrolysis; gene expression inhibition;
KW   hormone regulation; hydrolysis reagents; alkyl phosphate esters;
KW   detoxification; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "DyTx-NH(CH2)6-PO4-cytosine"
FT
XX
PN   WO9429316-A2.
XX
PD   22-DEC-1994.
XX
PF   09-JUN-1994;   94WO-US06284.
XX
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Hemmi GW,  Iverson B,  Kral VA,  Magda D;
PI   Miller RA,  Mody T, Ross KL,  Sessler JL,  Smith DA;
PI   Wright M;
XX
DR   WPI; 1995-036382/05.
XX
PT   Texaphyrin metal complex mediated ester hydrolysis - esp. useful
PT   for targeted intracellular hydrolysis of mRNA and for inhibiting
PT   gene expression
XX
PS   Disclosure; Fig 21; 125pp; English.
XX
CC   AAQ91451-Q91457 are texaphyrin lanthanide metal DNA conjugates, which
CC   are esp. useful for the targeted intracellular hydrolysis of mRNA;
CC   inhibiting gene expression. They may also be used for the treament
CC   of liver disease, as hormone regulation agents and as hydrolysis
CC   reagents for the detoxification of alkyl phosphate esters.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 17 BP; 1 A; 3 C; 8 G; 5 T; 0 other;

  Query Match              9.2%;  Score 12.8;  DB 1;  Length 17;
  Best Local Similarity   87.5%;  Pred. No. 1.8e+02;
  Matches   14;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAG 1670
              | ||||  |||||||||
Db         16 AACACCCGGCTCACAG 1


RESULT 77
AAX75159/c
ID   AAX75159 standard; RNA; 17 BP.
XX
AC   AAX75159;
XX
DT   28-JUL-1999  (first entry)
XX
DE   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #687.
XX
KW   Vascular endothelial growth factor receptor; VEGF receptor; flt-1;
KW   flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW   tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW   fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW   foetal liver kinase 1; ss.
XX
OS   Mus sp.
XX
PN   WO9715662-A2.
XX
PD   01-MAY-1997.
XX
PF   25-OCT-1996;   96WO-US17480.
XX
PR   11-JAN-1996;   96US-0584040.
PR   26-OCT-1995;   95US-0005974.
XX
PA   (CHIR ) CHIRON CORP.
PA   (RIBO-) RIBOZYME PHARM INC.
XX
PI   Escobedo J,  McSwiggen J,  Pavco P,  Stinchcomb D;
XX
DR   WPI; 1997-259017/23.
XX
PT   Nucleic acid molecule modulating VEGF receptor(s) gene expression or
PT   mRNA stability  - useful for treating e.g. tumour angiogenesis,
PT   psoriasis, rheumatoid arthritis, etc., in a human patient
XX
PS   Claim 4; Page 175; 218pp; English.
XX
CC   The present invention describes nucleic acid molecules which modulate
CC   the synthesis, expression and/or stability of a mRNA encoding 1 or more
CC   receptors of vascular endothelial growth factor (VEGF). A patient
CC   (preferably human) having a condition associated with the level of the
CC   fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC   receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC   angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can
CC   be treated by administering the nucleic acid molecule or the expression
CC   vector to the patient. AAX67275 to AAX75752 represent specific examples
```

```
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 116651; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989,. ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 other;

  Query Match             9.4%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              |||||||||||||
Db         13 CCAACTCCTCCCT 1


RESULT 74
ABF16655
ID   ABF16655 standard; DNA; 13 BP.
XX
AC   ABF16655;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 116652 for detecting SNP TSC0029189.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 116652; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 other;

  Query Match             9.4%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1739 CCAACTCCTCCCT 1751
              |||||||||||||
Db          1 CCAACTCCTCCCT 13


RESULT 75
AAT50323
ID   AAT50323 standard; RNA; 15 BP.
XX
AC   AAT50323;
XX
DT   11-MAR-1997  (first entry)
XX
DE   Rabbit CETP HH ribozyme target sequence #1580.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;
KW   LDL; ss.
XX
OS   Oryctolagus cuniculus.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 43; 72pp; English.
XX
CC   AAT50138-T50359 represent target sequences for the rabbit cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT50360-T50546). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
```

```
Qy       1720 CGGAGATGGAGATTGGCT 1737
              | ||||||||| || |||
Db         18 CTGAGATGGAGTTTCGCT 1

RESULT 71
ABC47950
ID   ABC47950 standard; DNA; 13 BP.
XX
AC   ABC47950;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 47967 for detecting SNP TSC0013727.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 47967; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 other;

  Query Match             9.4%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1707 TGGGTTAGGAGTA 1719
              |||||||||||||
Db          1 TGGGTTAGGAGTA 13

RESULT 72
ABC47951/c
ID   ABC47951 standard; DNA; 13 BP.
XX
AC   ABC47951;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 47968 for detecting SNP TSC0013727.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
PF   06-APR-2001; 2001WO-IB00713.
XX
PR   07-APR-2000; 2000DE-1019173.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2001-657177/75.
XX
PT   Set of oligonucleotides, useful for diagnosis and cell typing, is
PT   designed to detect single nucleotide polymorphisms and cytosine
PT   methylation status  -
XX
PS   Claim 1; SEQ ID 47968; 29pp + Sequence Listing; German.
XX
CC   This invention describes novel oligonucleotide primers or peptide nucleic
CC   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
CC   and cytosine methylation status in chemically pretreated genomic DNA. The
CC   oligonucleotides are used for diagnosis and/or prognosis of cancer and a
CC   range of diseases including immune system, gastrointestinal, respiratory,
CC   central nervous system, cardiovascular and metabolic disorders. The
CC   oligomers are also used for detecting cell type differentiation.
CC   ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and
CC   ABI00010-ABI82073 represent the oligomers described in the invention.
CC   NOTE: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 other;

  Query Match             9.4%;  Score 13;  DB 1;  Length 13;
  Best Local Similarity   100.0%;  Pred. No. 1e+02;
  Matches   13;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1707 TGGGTTAGGAGTA 1719
              |||||||||||||
Db          13 TGGGTTAGGAGTA 1

RESULT 73
ABF16654/c
ID   ABF16654 standard; DNA; 13 BP.
XX
AC   ABF16654;
XX
DT   21-FEB-2002  (first entry)
XX
DE   Oligonucleotide SEQ ID NO 116651 for detecting SNP TSC0029189.
XX
KW   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
KW   peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
KW   central nervous system; gastrointestinal; respiratory; immune; metabolic.
XX
OS   Homo sapiens.
XX
PN   WO200177384-A2.
XX
PD   18-OCT-2001.
XX
```

```
Qy       1691 CCAGCGTGGTGGAAGTTG 1708
              |||| |||||||||  | |
Db         18 CCAGTGTGGTGGAATTCG 1
```

RESULT 69
ABA83557/c
ID  ABA83557 standard; DNA; 18 BP.
XX
AC  ABA83557;
XX
DT  08-FEB-2002  (first entry)
XX
DE  Mouse MP-1 antisense oligonucleotide SEQ ID NO 96.
XX
KW  Human; mouse; rat; antisense gene therapy; MP-1; MAP kinase Partner 1;
KW  antiinflammatory; cytostatic; antimicrobial; infection; tumour;
KW  phosphorothioate; ss.
XX
OS  Mus musculus.
OS  Synthetic.
XX

| FH | Key | Location/Qualifiers |
|---|---|---|
| FT | modified_base | 1..18 |
| FT | | /*tag= a |
| FT | | /mod_base= OTHER |
| FT | | /note= "phosphorothioate backbone linkage, all cytidine |
| FT | | residues are 5-methylcytidines" |
| FT | modified_base | 1..4 |
| FT | | /*tag= b |
| FT | | /mod_base= OTHER |
| FT | | /note= "2'-MOE wings" |
| FT | modified_base | 15..18 |
| FT | | /*tag= c |
| FT | | /mod_base= OTHER |
| FT | | /note= "2'-MOE wings" |

XX
PN  US6306606-B1.
XX
PD  23-OCT-2001.
XX
PF  22-NOV-2000; 2000US-0721822.
XX
PR  22-NOV-2000; 2000US-0721822.
XX
PA  (ISIS-) ISIS PHARM INC.
PA  (UYVI-) UNIV VIRGINIA.
XX
PI  Weber MJ,  Wyatt J,  Cowsert LM;
XX
DR  WPI; 2002-040199/05.
XX
PT  New antisense oligonucleotides for modulating the expression of MP-1
PT  (MAP kinase partner 1), for preventing, delaying or treating infection,
PT  inflammation or tumour formation, especially in humans -
XX
PS  Example 17; Column 43-44; 47pp; English.
XX
CC  The invention relates to an antisense compound (ABA83459-ABA83576) which
CC  is up to 30 nucleobases in length and that inhibits the expression of
CC  MP-1 (MAP kinase Partner 1) in cells or tissues comprising contacting the
CC  cells or tissues in vitro with the antisense compound so that expression
CC  of MP-1 is inhibited. The antisense compounds have potential
CC  antiinflammatory, cytostatic and antimicrobial activity. The antisense
CC  compounds are useful for diagnostics, therapeutics, prophylaxis or as
CC  research reagents or kits. The antisense oligonucleotides are useful in
CC  gene therapy for treating an animal, particularly a human, suspected of
CC  having or being prone to a disease or condition associated with the
CC  expression of MP-1. In particular, the antisense oligonucleotides are
CC  useful for preventing, delaying or treating infection, inflammation or
CC  tumour formation. The present sequence is that of a mouse MP-1 antisense
CC  oligonucleotide, comprising a chimeric oligonucleotide gapmer 18
CC  nucleotides in length, composed of a central gap region of ten
CC  2'-deoxynucleotides flanked by four nucleotide 2'-MOE wings.
XX
SQ  Sequence 18 BP; 3 A; 3 C; 8 G; 4 T; 0 other;

Query Match  9.5%;  Score 13.2;  DB 1;  Length 18;
Best Local Similarity  83.3%;  Pred. No. 1.6e+02;
Matches  15;  Conservative  0;  Mismatches  3;  Indels  0;  Gaps  0;

```
Qy       1664 CTCACAGCTGGAACCCTG 1681
              ||||| || | |||||||
Db         18 CTCACTGCAGCAACCCTG 1
```

RESULT 70
ABL45037/c
ID  ABL45037 standard; DNA; 18 BP.
XX
AC  ABL45037;
XX
DT  11-APR-2002  (first entry)
XX
DE  Human chromosome 1p36-35 PCR primer SEQ ID NO:2081.
XX
KW  Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis;
KW  genome; PCR primer; ss.
XX
OS  Homo sapiens.
XX
PN  JP2001321190-A.
XX
PD  20-NOV-2001.
XX
PF  12-MAR-2001; 2001JP-0068285.
XX
PR  10-MAR-2000; 2000JP-0066716.
XX
PA  (RIKA ) RIKAGAKU KENKYUSHO.
PA  (GENO-) GENOTEX YG.
XX
DR  WPI; 2002-144136/19.
XX
PT  Arraying genome clones -
XX
PS  Claim 4; Page 45; 528pp; Japanese.
XX
CC  The present invention describes a method of arraying genome clones. The
CC  method comprises: (a) clones of the genomic libraries contained in
CC  multiwell plates numbered for discrimination are mixed in each of the
CC  multiwell plates; (b) a primer designed based on the chromosome marker
CC  sequence is added to the mixture to carry out an amplification reaction;
CC  (c) a signal corresponding to the marker is detected from the resultant
CC  amplified product to specify the discrimination Nos. of the multiwell
CC  plates containing the clones having said marker sequence; (d) the order
CC  of the markers is changed so that the same discrimination Nos. succeed to
CC  the maximum in the specified discrimination Nos. to array the multiwell
CC  plates; (e) the clones in the multiwell plates of the specified
CC  discrimination Nos. are mixed respectively in each wells of longitudinal
CC  and lateral directions; (f) the mixed clones are cultured and the
CC  resultant cultures are amplified by using the above primer; (g) signals
CC  are detected from the amplified products; (h) the clones in the multiwell
CC  plates are specified from the detected result; and (i) the clones are
CC  reconstituted as the positions on the chromosome and arrayed. The
CC  microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC  PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC  represent PCR primers for human chromosome 21q22.1, which are
CC  specifically claimed for use in the present invention.
XX
SQ  Sequence 18 BP; 6 A; 6 C; 3 G; 3 T; 0 other;

Query Match  9.5%;  Score 13.2;  DB 1;  Length 18;
Best Local Similarity  83.3%;  Pred. No. 1.6e+02;
Matches  15;  Conservative  0;  Mismatches  3;  Indels  0;  Gaps  0;

```
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  i
FT                   /mod_base= m5c
FT   modified_base   15..18
FT                   /*tag=  j
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
XX
PN   US6294382-B1.
XX
PD   25-SEP-2001.
XX
PF   27-NOV-2000; 2000US-0723534.
XX
PR   27-NOV-2000; 2000US-0723534.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Bennett CF,  Cowsert LM;
XX
DR   WPI; 2001-638016/73.
XX
PT   New antisense oligonucleotides for inhibiting the expression of human
PT   steroid receptor coactivator-1, particularly useful for preventing,
PT   delaying or treating infection, inflammation or tumor formation  -
XX
PS   Claim 3; Column 42; 36pp; English.
XX
CC   The present invention relates to an antisense compound of up to 30
CC   nucleobases in length, which specifically hybridises with and inhibits
CC   the expression of human steroid receptor coactivator-1 (SRC-1) (also
CC   known as F-SRC-1 and NcoA-1) gene. The antisense compounds are useful
CC   for diagnostics, therapeutics, prophylaxis, or as research reagents or
CC   kits. The antisense oligonucleotides are useful for treating an animal,
CC   particularly a human, suspected of having or being prone to a disease
CC   or condition associated with the expression of SRC-1. In particular,
CC   the antisense oligonucleotides are useful for preventing, delaying or
CC   treating infection, inflammation or tumour formation. The present
CC   sequence is an antisense oligonucleotide, ISIS# 29889, targetted to
CC   human SRC-1 DNA.
XX
SQ   Sequence 18 BP; 5 A; 7 C; 3 G; 3 T; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1691 CCAGCGTGGTGGAAGTTG 1708
              |||| ||||||||| | |
Db         18 CCAGTGTGGTGGAATTCG 1


RESULT 68
AAD41916/c
ID   AAD41916 standard; DNA; 18 BP.
XX
AC   AAD41916;
XX
DT   30-OCT-2002  (first entry)
XX
DE   Human SRC-1 antisense oligonucleotide, ISIS 29849.
XX
KW   Human; steroid receptor coactivator-1; SRC-1; antisense compound;
KW   diagnostic; therapeutic; prophylaxis; antisense therapy; antisense;
KW   phosphorothioate backbone; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..18
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..4
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nuclectides"
FT   modified_base   15..18
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'methoxyethyl nucleotides"
FT   modified_base   1
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  g
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  h
FT                   /mod_base= m5c
FT   modified_base   13
FT                   /*tag=  i
FT                   /mod_base= m5c
FT   modified_base   15
FT                   /*tag=  j
FT                   /mod_base= m5c
XX
PN   WO200244325-A2.
XX
PD   06-JUN-2002.
XX
PF   26-NOV-2001; 2001WO-US44179.
XX
PR   27-NOV-2000; 2000US-0723379.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI   O'Malley BW,  Bennett CF,  Cowsert LM;
XX
DR   WPI; 2002-537447/57.
XX
PT   Novel antisense compound targeted to nucleic acid molecules encoding
PT   human steroid receptor coactivator-1 (SRC-1), useful for inhibiting
PT   expression of SRC-1 in human cells or tissues  -
XX
PS   Example 15; Page 79; 103pp; English.
XX
CC   The invention relates to antisense compounds, compositions and methods
CC   for modulating the expression of human steroid receptor coactivator-1
CC   (SRC-1). The compositions comprise antisense oligonucleotides targetted
CC   to nucleic acids encoding SRC-1. The antisense compound is useful for
CC   inhibiting the expression of SRC-1 in human cells or tissues. It is also
CC   useful for treating a human having a disease or condition associated
CC   with SRC-1, by inhibiting expression of SRC-1. It is also useful for
CC   diagnostics, therapeutics, prophylaxis and as research reagents and
CC   kits. It is also used in antisense therapy. The present sequence is
CC   an antisense oligonucleotide targetted to human SRC-1 DNA. This sequence
CC   is used in the exemplification of the invention.
XX
SQ   Sequence 18 BP; 5 A; 7 C; 3 G; 3 T; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;
```

```
PN   US6037142-A.
XX
PD   14-MAR-2000.
XX
PF   23-FEB-1999;   99US-0255912.
XX
PR   23-FEB-1999;   99US-0255912.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Cowsert LM;
XX
DR   WPI; 2000-269886/23.
XX
PT   New antisense compound that inhibits human Smad2, useful e.g. for
PT   treating or preventing infection, inflammation and tumours  -
XX
PS   Claim 11; Column 39; 31pp; English.
XX
CC   This sequence represents an antisense nucleotide sequence targeting
CC   human Smad2. Smad2 is also known as MADH2, MADR2, hMAD2 and JV18-1, and
CC   is a member of a subgroup of Smad family transcription factors which are
CC   cytosolic proteins regulated by transforming growth factor-beta
CC   (TGF-beta) and activins. Smads exist as monomers in unstimulated cells
CC   as homo- or heterodimerise and translocate to the nucleus and activate
CC   target gene transcription upon ligand binding. The Smad2 gene is located
CC   on chromosome 18q21. The invention relates to antisense compounds
CC   (see AAA10548-A10587) targeted to the Smad2 nucleotide sequence. The
CC   antisense oligonucleotide sequences inhibit Smad2 expression by
CC   hybridising to DNA or RNA. The antisense nucleotides are used to treat
CC   or prevent diseases associated with expression of Smad2, e.g. infection,
CC   inflammation and tumours. The oligonucleotides can also be used as
CC   diagnostic or research reagents.
XX
SQ   Sequence 18 BP; 4 A; 2 C; 7 G; 5 T; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1699 GTGGAAGTTGGGTTAGGA 1716
              | ||||||| |||||||
Db          1 GCGGAAGTTCTGTTAGGA 18


RESULT 66
AAZ98709/c
ID   AAZ98709 standard; DNA; 18 BP.
XX
AC   AAZ98709;
XX
DT   20-JUN-2000  (first entry)
XX
DE   Collagen promoter inhibitory oligonucleotide Oligo Col 158 APS.
XX
KW   Collagen; inhibit; myocardial fibrosis; hypertensive heart disease;
KW   atherosclerosis; restenosis; liver cirrhosis; lung fibrosis; burn injury;
KW   peritoneal fibrosis; skin fibrosis; scleroderma; hypertrophic scar; ss.
XX
OS   Rattus sp.
XX
PN   WO200008213-A1.
XX
PD   17-FEB-2000.
XX
PF   06-AUG-1999;   99WO-US17824.
XX
PR   07-AUG-1998;   98US-0130888.
XX
PA   (GUNT/) GUNTAKA R V.
XX
PI   Guntaka RV,  Weber KT,  Kovacs A,  Kandala J;
XX
DR   WPI; 2000-205739/18.
XX
PT   Inhibitors of collagen gene useful for treating fibrosis associated
PT   with atherosclerosis, restenosis, liver cirrhosis, lung and skin
PT   fibrosis, comprises oligomers capable of inhibiting collagen gene  -
XX
PS   Claim 19; Fig 8; 77pp; English.
XX
CC   This sequence represents an oligomer which is capable of inhibiting the
CC   expression of the collagen gene. The oligomer is capable of binding to
CC   the promoter region of the collagen gene. Collagen is a family of fibrous
CC   proteins, and is the major element of skin, bone, tendon, cartilage,
CC   blood vessels and teeth. The oligomers are useful for inhibiting
CC   expression of the collagen gene, comprising inserting the oligomers into
CC   a cell and causing an intracellular reaction to inhibit the gene
CC   expression. The collagen inhibitory oligomers of the invention are useful
CC   for treating pathological fibrosis associated with myocardial fibrosis in
CC   hypertensive heart disease, atherosclerosis, restenosis, liver cirrhosis,
CC   lung fibrosis, peritoneal fibrosis and skin fibrosis found in
CC   scleroderma, hypertrophic scars and burn injury.
XX
SQ   Sequence 18 BP; 6 A; 0 C; 12 G; 0 U; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTCCCTAT 1753
              |||||  |||||||| |
Db         18 CTCCCCCCTCCTCCCTTT 1


RESULT 67
AAD20365/c
ID   AAD20365 standard; DNA; 18 BP.
XX
AC   AAD20365;
XX
DT   03-JAN-2002  (first entry)
XX
DE   Antisense oligo, ISIS# 29889, targetted to human SRC-1 DNA.
XX
KW   Human; antisense; steroid receptor coactivator-1; SRC-1; F-SRC-1; NcoA-1;
KW   diagnostic; therapeutic; prophylaxis; infection; inflammation;
KW   cytostatic; tumour formation; antiinflammatory; antibacterial;
KW   phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..4
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl residues"
FT   modified_base   1
FT                   /*tag=  c
FT                   /mod_base= m5c
FT   modified_base   7
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   8
FT                   /*tag=  e
FT                   /mod_base= m5c
FT   modified_base   10
FT                   /*tag=  f
FT                   /mod_base= m5c
FT   modified_base   11
FT                   /*tag=  g
```

```
AAT60161/c
ID   AAT60161 standard; DNA; 18 BP.
XX
AC   AAT60161;
XX
DT   01-DEC-1997  (first entry)
XX
DE   Collagen gene promoter region binding oligomer Oligo 158 APS.
XX
KW   Triplex; inhibition; collagen gene; promoter; pathological fibrosis;
KW   myocardial fibrosis; hypertensive heart disease; atherosclerosis;
KW   restenosis; liver cirrhosis; lung fibrosis; skin fibrosis; scleroderma;
KW   hypertrophic scar; burn injury; rat; polypurine; polypyrimidine; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   misc_feature    1..18
FT                   /*tag=  a
FT                   /note= "Phosphorothioate linkages"
XX
PN   WO9710254-A1.
XX
PD   20-MAR-1997.
XX
PF   12-SEP-1996;   96WO-US14640.
XX
PR   11-SEP-1996;   96US-0712357.
PR   15-SEP-1995;   95US-0528836.
XX
PA   (GUNT/) GUNTAKA R V.
XX
PI   Guntaka RV,  Kandala J,  Kovacs A,  Weber KT;
XX
DR   WPI; 1997-202172/18.
XX
PT   Triplex forming oligomer binds to collagen gene promoter region -
PT   used to impede pathological fibrosis etc.
XX
PS   Claim 18; Page 36; 52pp; English.
XX
CC   An oligomer has been produced which is capable of inhibiting expression
CC   of a collagen gene. The present sequence represents a specifically
CC   claimed oligomer Oligo 158 APS, which binds to the polypurine-
CC   polypyrimidine region of the rat alpha1(I) collagen gene promoter
CC   region. The oligomer may be used to impede pathological fibrosis which
CC   is associated with myocardial fibrosis in hypertensive heart diseases,
CC   atherosclerosis, restenosis, liver cirrhosis, lung fibrosis, and skin
CC   fibrosis found in scleroderma, in hypertrophic scars and in skin
CC   following burn injury. The oligomer inhibits expression of a collagen
CC   gene after insertion into a cell by causing an intracellular reaction
CC   which inhibits gene expression. The oligomer is preferably a triplex
CC   forming oligomer (TFO) which is targeted to a 30-mer polypurine
CC   oligonucleotide corresponding to the noncoding strand of the promoter
CC   between -170 and -140. This section was chosen due to its binding
CC   stability at physiological pH.
XX
SQ   Sequence 18 BP; 6 A; 0 C; 12 G; 0 U; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTCCCTAT 1753
              |||||  |||||||||  |
Db         18 CTCCCCCCTCCTCCCTTT 1


RESULT 64
AAA92575
ID   AAA92575 standard; DNA; 18 BP.
XX
AC   AAA92575;
XX
DT   04-JAN-2001  (first entry)
XX
DE   Antisense oligonucleotide ISIS# 30285.
XX
KW   Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory;
KW   SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
XX
OS   Synthetic.
XX
PN   US6107092-A.
XX
PD   22-AUG-2000.
XX
PF   29-MAR-1999;   99US-0280409.
XX
PR   29-MAR-1999;   99US-0280409.
XX
PA   (ISIS-) ISIS PHARM INC.
PA   (BAYU ) BAYLOR COLLEGE MEDICINE.
XX
PI   Cowsert LM,  Bennett CF,  O'Malley BW;
XX
DR   WPI; 2000-586211/55.
XX
PT   Antisense compounds targeted to steroid receptor RNA activator useful
PT   for diagnosis, prophylaxis and treatment of diseases associated with
PT   the steroid activator, such as infection, inflammation or tumor
PT   formation  -
XX
PS   Claim 3; Column 41; 47pp; English.
XX
CC   The present sequence is one of a large number of antisense
CC   oligonucleotides which is directed against one of four human steroid
CC   receptor RNA activator (SRA) nucleic acid sequences. Two series of
CC   antisense oligonucleotides were synthesised. The first series comprised
CC   8-30 oligodeoxynucleotides with a phosphorothioate backbone. The second
CC   series comprised chimeric oligonucleotides composed of a central gap
CC   region, consisting of ten 2'-deoxynucleotides, which was flanked on both
CC   sides by four-nucleotide wings. The wings were composed of
CC   2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same
CC   nucleotide sequences. The antisense compounds are useful for research,
CC   diagnosis, treatment and prophylaxis to prevent or delay infection,
CC   inflammation or tumour formation. Therapeutically the oligonucleotides
CC   are highly safe and are effectively administered to humans.
XX
SQ   Sequence 18 BP; 3 A; 4 C; 6 G; 5 T; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1668 CAGCTGGAACCCTGGTGT 1685
              | |||||||  ||||||  |
Db          1 CTGCTGGAAGCCTGGTAT 18


RESULT 65
AAA10567
ID   AAA10567 standard; DNA; 18 BP.
XX
AC   AAA10567;
XX
DT   29-JUN-2000  (first entry)
XX
DE   Smad2 antisense oligonucleotide sequence #20 (ISIS# 27797).
XX
KW   Smad2; MADH2; MADR2; hMAD2; JV18-1; transcription factor; inflammation;
KW   chromosome 18q21; antisense compound; treat; prevent; infection; tumour;
KW   diagnostic reagent; research reagent; ss; cancer.
XX
OS   Synthetic.
XX
```

```
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1644 AGCAGAAGGCAAGCA 1658
              ||||||||||| |||
Db         18 AGCAGAAGGCATGCA 4


RESULT 61
ABL43434/c
ID   ABL43434 standard; DNA; 19 BP.
XX
AC   ABL43434;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:478.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis;
KW   genome; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-0068285.
XX
PR   10-MAR-2000; 2000JP-0066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones  -
XX
PS   Claim 4; Page 14; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention.
XX
SQ   Sequence 19 BP; 1 A; 6 C; 3 G; 9 T; 0 other;

  Query Match             9.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1644 AGCAGAAGGCAAGCA 1658
              ||||||||||| |||
Db         18 AGCAGAAGGCATGCA 4


RESULT 62
AAT94803/c
ID   AAT94803 standard; DNA; 18 BP.
XX
AC   AAT94803;
XX
DT   19-FEB-1998  (first entry)
XX
DE   Human leukocyte antigen class I gene URSTO probe 531-548.
XX
KW   Human leukocyte antigen; HLA; probe; tissue transplantation;
KW   MHC gene; major histocompatibility complex; paternity test;
KW   forensic medicine; haematological malignancy; inherited disorder;
KW   adoptive immunotherapy; identification; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9720197-A2.
XX
PD   05-JUN-1997.
XX
PF   29-NOV-1996;   96WO-GB02959.
XX
PR   29-NOV-1995;   95GB-0024381.
XX
PA   (NOLA-) NOLAN BONE MARROW TRUST ANTHONY.
XX
PI   Arguello R,  Avakian H,  Madrigal A;
XX
DR   WPI; 1997-310717/28.
XX
PT   Identifying unknown allele(s) of a poly:allelic gene using panel of
PT   probes each recognising a sequence motif present in some allele(s) -
PT   useful for donor matching in tissue transplantation
XX
PS   Claim 5; Page 19; 64pp; English.
XX
CC   A novel method has been developed for identifying an unknown allele of a
CC   polyallelic gene. The method involves: (a) contacting the unknown allele
CC   with a panel of probes, each of which recognises a sequence motif that
CC   is present in some alleles of the polyallelic gene but not in others;
CC   (b) observing which probes recognise the unknown allele so as to obtain
CC   a fingerprint of the unknown allele; and (c) comparing the fingerprint
CC   with fingerprints of known alleles. The present sequence represents a
CC   specifically claimed probe for use in the method where the polyallelic
CC   gene is a human leukocyte antigen class I gene. The method can be used
CC   for genes such as mammalian MHC genes, specifically the HLA class I and
CC   II genes, the T cell receptor genes in mammals, TAP, LMP, ras,
CC   nonclassical HLA class I genes, human complement factor genes C4 and C2,
CC   Bf in the HLA complex, and genes located in mitochondrial DNA, bacterial
CC   chromosomes and viral DNA. The method is particularly useful for
CC   matching the alleles of the HLA genes in a prospective donor and a
CC   prospective recipient in tissue or organ transplantations. The method
CC   can also be used in paternity testing, in forensic medicine, as a
CC   follow up technique in treatment of haematological malignancies or
CC   inherited disorders, in adoptive immunotherapy, and in identification
CC   of bacteria and viruses. The method can provide for the identification
CC   of alleles of the polyallelic genes using a limited number of selected
CC   recurring motif probes.
XX
SQ   Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 other;

  Query Match             9.5%;  Score 13.2;  DB 1;  Length 18;
  Best Local Similarity   83.3%;  Pred. No. 1.6e+02;
  Matches   15;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1732 TTGGCTCCCAACTCCTCC 1749
              | |||| |||| ||||
Db         18 TAGGCTCTCAACTGCTCC 1


RESULT 63
```

```
CC   and for identifying mutagenic effects of a compound.
XX
SQ   Sequence 19 BP; 6 A; 5 C; 7 G; 1 T; 0 other;

  Query Match             9.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACA 1669
              ||||||||||| |||
Db          5 AGCACCAGGCTGACA 19


RESULT 59
AAH58085/c
ID   AAH58085 standard; DNA; 19 BP.
XX
AC   AAH58085;
XX
DT   10-SEP-2001  (first entry)
XX
DE   Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:509.
XX
KW   Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW   recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW   proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW   cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW   matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW   antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW   antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW   atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW   basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW   sickle cell retinopathy; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200130362-A2.
XX
PD   03-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-US29500.
XX
PR   26-OCT-1999;   99US-0161532.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Robbins JM,  Tritz R;
XX
DR   WPI; 2001-300427/31.
XX
PT   Treating proliferative skin or eye diseases and scarring, using
PT   ribozymes that cleave RNA encoding cytokines involved in inflammation,
PT   matrix metalloproteinases, growth factors and cell-cycle dependent
PT   kinases -
XX
PS   Example 1; Page 109; 408pp; English.
XX
CC   The present invention describes a method for treating a proliferative
CC   skin or eye disease and scarring. The method involves administering a
CC   ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC   inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC   dependent kinase, growth factor or a reductase, or administering a
CC   nucleic acid molecule (II) comprising a promoter operably linked to a
CC   nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC   dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC   ophthalmological, vulnerary, keratolytic and virucide activities, and
CC   cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC   in gene therapy. (I) and (II) are useful for treating proliferative
CC   skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC   squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC   also be used for treating proliferative eye diseases such as diabetic
CC   retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC   prematurity and retinal detachment, and for treating and preventing
CC   scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC   scar. AAH57577 to AAH62099 represent sequences used in the
CC   exemplification of the present invention.
XX
SQ   Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 other;

  Query Match             9.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1735 GCTCCCAACTCCTCC 1749
              |||||| |||||||
Db         16 GCTCCCGACTCCTCC 2


RESULT 60
ABL43426/c
ID   ABL43426 standard; DNA; 19 BP.
XX
AC   ABL43426;
XX
DT   11-APR-2002  (first entry)
XX
DE   Human chromosome 1p36-35 PCR primer SEQ ID NO:470.
XX
KW   Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis;
KW   genome; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   JP2001321190-A.
XX
PD   20-NOV-2001.
XX
PF   12-MAR-2001; 2001JP-0068285.
XX
PR   10-MAR-2000; 2000JP-0066716.
XX
PA   (RIKA ) RIKAGAKU KENKYUSHO.
PA   (GENO-) GENOTEX YG.
XX
DR   WPI; 2002-144136/19.
XX
PT   Arraying genome clones  -
XX
PS   Claim 4; Page 14; 528pp; Japanese.
XX
CC   The present invention describes a method of arraying genome clones. The
CC   method comprises: (a) clones of the genomic libraries contained in
CC   multiwell plates numbered for discrimination are mixed in each of the
CC   multiwell plates; (b) a primer designed based on the chromosome marker
CC   sequence is added to the mixture to carry out an amplification reaction;
CC   (c) a signal corresponding to the marker is detected from the resultant
CC   amplified product to specify the discrimination Nos. of the multiwell
CC   plates containing the clones having said marker sequence; (d) the order
CC   of the markers is changed so that the same discrimination Nos. succeed to
CC   the maximum in the specified discrimination Nos. to array the multiwell
CC   plates; (e) the clones in the multiwell plates of the specified
CC   discrimination Nos. are mixed respectively in each wells of longitudinal
CC   and lateral directions; (f) the mixed clones are cultured and the
CC   resultant cultures are amplified by using the above primer; (g) signals
CC   are detected from the amplified products; (h) the clones in the multiwell
CC   plates are specified from the detected result; and (i) the clones are
CC   reconstituted as the positions on the chromosome and arrayed. The
CC   microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC   PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC   represent PCR primers for human chromosome 21q22.1, which are
CC   specifically claimed for use in the present invention.
XX
SQ   Sequence 19 BP; 1 A; 6 C; 3 G; 9 T; 0 other;

  Query Match             9.6%;  Score 13.4;  DB 1;  Length 19;
```

```
XX
PT   Collection of binding groups for determining or typing samples,
PT   especially clinical samples, has groups capable to identify essentially
PT   all members of the family of nucleic acids of relatively high
PT   significance  -
XX
PS   Disclosure; Page 14; 166pp; English.
XX
CC   The present invention describes a collection of binding groups for a
CC   family of nucleic acids comprising members of relative high and relative
CC   low significance, where the binding groups are selected to be capable to
CC   identify, alone or in combination, essentially all members of the family
CC   of nucleic acids of relatively high significance. The collection of
CC   binding groups is useful for typing of nucleic acid in a clinical sample,
CC   by contacting the nucleic acid with the collection and determining
CC   whether one or more binding groups bound to the nucleic acid of the
CC   sample. This method is useful for determining whether the sample
CC   comprises at least a part of a member of relatively high significance of
CC   a family of nucleic acids. The collection of binding groups is useful for
CC   diagnosing the severity of a disease caused by a pathogen containing a
CC   member of a family of nucleic acids. ABL88779 to ABL89321 represent
CC   oligonucleotide sequences used in the exemplification of the present
CC   invention.
XX
SQ   Sequence 18 BP; 7 A; 1 C; 8 G; 2 T; 0 other;

  Query Match             9.6%;  Score 13.4;  DB 1;  Length 18;
  Best Local Similarity   93.3%;  Pred. No. 1.5e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1717 GTACGGAGATGGAGA 1731
                ||||  |||||||||
Db          1 GTACAGAGATGGAGA 15


RESULT 57
AAA82923/c
ID   AAA82923 standard; DNA; 19 BP.
XX
AC   AAA82923;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk4 ribozyme binding site #104.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic;
KW   restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
XX
PF   06-DEC-1999;   99WO-US28772.
XX
PR   04-DEC-1998;   98US-0110954.
XX
PA   (IMMU-) IMMUSOL INC.
XX
PI   Tritz R,  Welch PJ,  Barber JR,  Robbins JM;
XX
DR   WPI; 2000-412314/35.
XX
PT   New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT   RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT   PCNA and Cyclin B1  -
XX
PS   Disclosure; Page 53; 109pp; English.
XX
CC   The present invention relates to a hairpin or hammerhead ribozyme,
CC   designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC   other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC   Representative examples of ribozyme recognition sites are given in
CC   AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC   inhibiting restenosis by introduction of the ribozyme into cells.
CC   The ribozyme is resistant to endonuclease activity and hence is
CC   efficient in restenosis treatment.
XX
SQ   Sequence 19 BP; 5 A; 3 C; 9 G; 2 T; 0 other;

  Query Match             9.6%;  Score 13.4;  DB 1;  Length 19;
  Best Local Similarity   93.3%;  Pred. No. 1.7e+02;
  Matches   14;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1735 GCTCCCAACTCCTCC 1749
                ||||||  ||||||||
Db         16 GCTCCCGACTCCTCC 2


RESULT 58
AAA51763
ID   AAA51763 standard; DNA; 19 BP.
XX
AC   AAA51763;
XX
DT   31-OCT-2000  (first entry)
XX
DE   Primer to amplify CYP3A5 gene in real time PCR.
XX
KW   CYP3A5; Cytochrome P450; transcription regulatory region; polymorphism;
KW   Activator protein-3 motif; AP-3; basic transcription element;
KW   drug metabolism; phenotype; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200039332-A1.
XX
PD   06-JUL-2000.
XX
PF   22-DEC-1999;   99WO-GB04380.
XX
PR   23-DEC-1998;   98GB-0028619.
XX
PA   (JANC ) JANSSEN PHARM NV.
XX
PI   Paulussen ADC,  Armstrong M;
XX
DR   WPI; 2000-452418/39.
XX
PT   Identifying subjects with a high drug metabolizing phenotype associated
PT   with cytochrome CYP3A5 expression for establishing whether a drug will
PT   be metabolized by the subject
XX
PS   Disclosure; Page 21; 68pp; English.
XX
CC   Primers AAA51762-63 were used to amplify cytochrome P450 CYP3A5 gene
CC   in a real time PCR assay to ensure specificity.
CC   Cytochrome P450 subfamily CYP3A5 transcription regulatory regions can be
CC   screened for the presence/absence of a polymorphic variant, preferably
CC   at positions -475 or -147 of the DNA of the 5' flanking region adjacent
CC   to the CYP3A5 coding sequence. The variants are present in an activator
CC   protein-3 (AP-3) motif and/or a basic transcription element (BTE). The
CC   polymorphisms cause increased CYP3A5 gene expression and this has been
CC   linked to drug metabolic activity. Screening for the presence of
CC   variants can be used to identify subjects with a high or low drug
CC   metabolizing phenotype associated with cytochrome CYP3A5 expression.
CC   Primers are used which in addition to hybridizing to the site of
CC   interest, are capable of introducing a restriction site which is absent
CC   in either the wild type sequence or polymorphic variants. Restriction
CC   enzyme cleavage analysis can then be used to indicate the presence or
CC   absence of the variant. The methods are used to establish, before
CC   treatment with a drug, whether the drug will be effectively metabolized
CC   by the patient, to identify compounds and transcription factors that can
CC   bind to a DNA sequence encoding CYP3A5, diagnosing susceptibility to a
CC   disease which is caused by toxins or procarcinogens metabolized by CYP3A5
```

XX
DE PCR primer for human GDNF promoter sequence.
XX
KW GDNF promoter; human; glial cell line-derived neurotrophic factor;
KW neurodegenerative disease; Parkinson's disease; renal disease; therapy;
KW urogenital disease; gastrointestinal disease; physical nerve trauma;
KW PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9907843-A1.
XX
PD 18-FEB-1999.
XX
PF 23-JUL-1998; 98WO-EP04620.
XX
PR 14-APR-1998; 98US-0081751.
PR 05-AUG-1997; 97US-0054812.
XX
PA (HOFF ) HOFFMANN LA ROCHE & CO AG F.
XX
PI Baecker PA, Johnson RM, Lee WH, Verity AN;
XX
DR WPI; 1999-180491/15.
XX
PT New human glial cell line-derived neurotrophic factor promoters -
PT useful in the treatment of neurodegenerative conditions including
PT Parkinson's disease
XX
PS Example 1; Page 34; 100pp; English.
XX
CC This sequence is a primer for a human glial cell line-derived
CC neurotrophic factor (hGDNF) promoter. The promoters can be used to
CC identify hGDNF modulators. hGDNF modulators are used to treat a mammal
CC exhibiting neurodegenerative disease-like symptoms, particularly,
CC Parkinson's disease, as well as renal, urogenital, and gastrointestinal
CC diseases, and neurodegenerative sequelae of physical nerve trauma. The
CC hGDNF modulator has anti-neurodegenerative activity and the promoters
CC regulate GDNF expression. GDNF has a developmental role in survival of
CC mid-brain dopaminergic neurons, cerebellar Purkinje neurons, and cranial
CC and spinal cord motor neurons. In the peripheral nervous system, GDNF
CC supports the development of multiple neuronal populations, including
CC sympathetic, parasympathetic, sensory, and autonomic neurons. Delivery of
CC a small molecule GDNF expression modulator is less pulsatile and less
CC invasive than prior art treatment involving intraparenchymal, ICV, or
CC intrathecal injection of GDNF.
XX
SQ Sequence 18 BP; 6 A; 7 C; 5 G; 0 U; 0 other;

Query Match 9.9%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 1.3e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1655 AGCACCAGGCTCACAGC 1671
||||||||| |||||
Db 2 AGCACCAGGCAGACAGC 18

RESULT 55
AAQ50940
ID AAQ50940 standard; DNA; 18 BP.
XX
AC AAQ50940;
XX
DT 25-MAR-2003 (updated)
DT 19-MAY-1994 (first entry)
XX
DE T-cell antigen receptor J-beta2.7 probe.
XX
KW RT-PCR; polymerase chain reaction; amplification; SSCP; J-domain;
KW single-strand conformation polymorphism; joining domain;
KW subtype beta 2; ss.
XX
OS Synthetic.
XX
PN WO9322455-A1.
XX
PD 11-NOV-1993.
XX
PF 30-APR-1993; 93WO-JP00577.
XX
PR 30-APR-1992; 92JP-0111467.
PR 31-JUL-1992; 92JP-0205054.
XX
PA (LTTL-) LTT INST CO LTD.
PA (TAIS ) TAISHO PHARM CO LTD.
XX
PI Ikeda Y, Mizushima Y, Nishioka K, Sakoda H, Yamamoto K;
XX
DR WPI; 1993-368813/46.
XX
PT Detection of expression of T-cell antigen receptor gene - in
PT cancer, viral or immune disease patients, by polymerase chain
PT reaction amplification of the gene and SSCP analysis
XX
PS Example 1; Page 24; 47pp; Japanese.
XX
CC Primers corresp. to DNA coding for part of the beta-chain of the T
CC cell antigen receptor (pref. the Variable region primers AAQ50905-
CC AAQ50926) are used in PCR to amplify the T cell antigen receptor gene.
CC The amplified gene is detected by the single-strand conformation
CC polymorphism method using hybridisation probes corresp. to the
CC beta-chain J domain (see AAQ50928-Q50940).
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 3 A; 6 C; 7 G; 2 T; 0 other;

Query Match 9.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1656 GCACCAGGCTCACAG 1670
||||||||||||| |
Db 3 GCACCAGGCTCACGG 17

RESULT 56
ABL88809
ID ABL88809 standard; DNA; 18 BP.
XX
AC ABL88809;
XX
DT 22-MAY-2002 (first entry)
XX
DE HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:31.
XX
KW Binding molecule; HIV-1; human immunodeficiency virus type 1;
KW reverse transcriptase; binding group; ss.
XX
OS Human immunodeficiency virus type 1.
OS Synthetic.
XX
PN EP1174518-A1.
XX
PD 23-JAN-2002.
XX
PF 20-JUL-2000; 2000EP-0202611.
XX
PR 20-JUL-2000; 2000EP-0202611.
XX
PA (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
XX
PI Loukachov VV, Van Gemen B, Goudsmit J;
XX
DR WPI; 2002-156696/21.

XX
PF 05-MAY-1998; 98WO-US09249.
XX
PR 19-DEC-1997; 97US-0068212.
PR 09-MAY-1997; 97US-0046059.
PR 09-JUN-1997; 97US-0049002.
PR 03-JUL-1997; 97US-0051718.
PR 22-AUG-1997; 97US-0056808.
PR 02-OCT-1997; 97US-0061321.
PR 02-OCT-1997; 97US-0061324.
PR 05-NOV-1997; 97US-0064866.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beaudry A, Beigelman L, Bellon L, Burgin A, Jarvis T;
PI Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Parry T, Reynolds M, Sweedler D, Thompson J, Workman CT;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected
PT processes - especially ribozymes that cleave Raf RNA for treating
PT cancer, restenosis, and also new ribozymes and modified nucleoside
PT triphosphates used as antiviral agents and synthons
XX
PS Claim 177; Page 147; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules
CC with endonuclease activity and catalytic activity, from the present
CC invention, are used to modulate gene expression in plant and mammalian
CC cells and to cleave target nucleic acid, particularly for treating
CC systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC psoriasis, non-hepatic ascites and infection. They may also be used to
CC detect genetic drift and mutations in diseased cells and to determine
CC c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC expression of the Raf gene, are used to treat cancer, restenosis,
CC psoriasis or rheumatoid arthritis, or generally any condition associated
CC with the level of c-raf. Introduction of sugar/phosphate modifications
CC increases stability against nuclease and activity. AAV90922 to AAV93877
CC represent NACs that can be used in the method, specifically for
CC modulating the expression of a Raf gene.
XX
SQ Sequence 17 BP; 2 A; 5 C; 4 G; 6 U; 0 other;

Query Match 9.9%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1646 CAGAAGGCAAGCACCAG 1662
||||||||||| |||
Db 17 CAGAAGGCAAGCTTCAG 1

RESULT 53
AAV91006/c
ID AAV91006 standard; RNA; 17 BP.
XX
AC AAV91006;
XX
DT 18-FEB-1999 (first entry)
XX
DE Human C-raf target site nucleotide position 581.
XX
KW Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW target; substrate; catalyst; modulation; expression; Raf gene;
KW delivery; screening; identification; synthesis; deprotection;
KW purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS Homo sapiens.
XX
PN WO9850530-A2.
XX
PD 12-NOV-1998.
XX
PF 05-MAY-1998; 98WO-US09249.
XX
PR 19-DEC-1997; 97US-0068212.
PR 09-MAY-1997; 97US-0046059.
PR 09-JUN-1997; 97US-0049002.
PR 03-JUL-1997; 97US-0051718.
PR 22-AUG-1997; 97US-0056808.
PR 02-OCT-1997; 97US-0061321.
PR 02-OCT-1997; 97US-0061324.
PR 05-NOV-1997; 97US-0064866.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Beaudry A, Beigelman L, Bellon L, Burgin A, Jarvis T;
PI Karpeisky A, Kisich K, Matulic-Adamic J, McSwiggen JA;
PI Parry T, Reynolds M, Sweedler D, Thompson J, Workman CT;
XX
DR WPI; 1999-009494/01.
XX
PT Identifying new catalytic nucleic acid that modulates selected
PT processes - especially ribozymes that cleave Raf RNA for treating
PT cancer, restenosis, and also new ribozymes and modified nucleoside
PT triphosphates used as antiviral agents and synthons
XX
PS Claim 177; Page 147; 259pp; English.
XX
CC A method has been developed for the identification of a nucleic acid
CC capable of modulating a process in a biological system. The method
CC comprises: (a) introducing into the system a random library of nucleic
CC acid catalysts (NAC) having a substrate binding domain (SBD), comprising
CC a random sequence, and a catalytic domain (CD); and (b) identifying NAC
CC in systems where modulation has occurred and/or determining the sequence
CC of at least part of the SBDs in such systems. Nucleic acid molecules
CC with endonuclease activity and catalytic activity, from the present
CC invention, are used to modulate gene expression in plant and mammalian
CC cells and to cleave target nucleic acid, particularly for treating
CC systemic diseases caused by specific RNA, e.g. cancer, inflammation,
CC psoriasis, non-hepatic ascites and infection. They may also be used to
CC detect genetic drift and mutations in diseased cells and to determine
CC c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate
CC expression of the Raf gene, are used to treat cancer, restenosis,
CC psoriasis or rheumatoid arthritis, or generally any condition associated
CC with the level of c-raf. Introduction of sugar/phosphate modifications
CC increases stability against nuclease and activity. AAV90922 to AAV93877
CC represent NACs that can be used in the method, specifically for
CC modulating the expression of a Raf gene.
XX
SQ Sequence 17 BP; 2 A; 5 C; 4 G; 6 U; 0 other;

Query Match 9.9%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 1.1e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1641 TGTAGCAGAAGGCAAGC 1657
||| ||||||||||
Db 17 TGTCACAGAAGGCAAGC 1

RESULT 54
AAX28045
ID AAX28045 standard; DNA; 18 BP.
XX
AC AAX28045;
XX
DT 10-JUN-1999 (first entry)

```
Qy       1662 GGCTCACAGCTGGAACCCT 1680
              ||||||| ||| || |||
Db         20 GGCTCACACCTGTAATCCT 2


RESULT 50
ABT23628/c
ID   ABT23628 standard; DNA; 20 BP.
XX
AC   ABT23628;
XX
DT   22-MAY-2003  (first entry)
XX
DE   Stabilising reagent method related oligo SEQ ID No 80.
XX
KW   Stabilising reaction reagent; PCR; primer; RNaseH; long-term storage;
KW   specific amplification; pathogenic microorganism; chimeric;
KW   genetic engineering; clinical medicine; ss.
XX
OS   Unidentified.
XX
PN   WO2002101042-A1.
XX
PD   19-DEC-2002.
XX
PF   12-JUN-2002; 2002WO-JP05832.
XX
PR   12-JUN-2001; 2001JP-0177737.
PR   20-AUG-2001; 2001JP-0249689.
XX
PA   (TAKA-) TAKARA BIO INC.
XX
PI   Sagawa H,  Uemori T,  Mukai H,  Yamamoto J,  Tomono J,  Kobayashi E;
PI   Enoki T,  Asada K,  Kato I;
XX
DR   WPI; 2003-148805/14.
XX
PT   Method for stabilizing and storing reaction reagents for specific
PT   amplification and detection of nucleic acids particularly in e.g.
PT   identifying pathogenic microorganisms or viruses in sample  -
XX
PS   Example 15; Page 137; 177pp; Japanese.
XX
CC   The invention relates to a novel stabilising reaction reagent for use in
CC   the amplification and/or detection of a target nucleic acid comprising:
CC   preparing a reaction mixture with e.g. a nucleic acid as template, at
CC   least 1 primer and RNaseH; and incubation of the reaction mixture for a
CC   defined period of time to form a reaction product during the
CC   amplification of such target nucleic acid. The method is useful for
CC   stabilising and long-term storage of reaction reagents for highly
CC   sensitive and specific amplification and detection of nucleic acids
CC   particularly in identifying pathogenic microorganisms or viruses in a
CC   sample using chimeric oligonucleotide primers, which is useful in genetic
CC   engineering and clinical medicine. This polynucleotide sequence
CC   represents an oligo relating to the novel stabilising reaction reagent
CC   method of the invention.
XX
SQ   Sequence 20 BP; 4 A; 1 C; 12 G; 3 T; 0 other;

  Query Match            10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTCCCTATC 1754
              | ||||||||||||  ||
Db         19 CCCCCAACTCCTCCCAGTC 1


RESULT 51
AAA58421
ID   AAA58421 standard; DNA; 20 BP.
XX
AC   AAA58421;
XX
DT   11-OCT-2000  (first entry)
XX
DE   Oct-4 transcript RT-PCR primer #2.
XX
KW   Human embryonic stem cell; oct-4 expression; development;
KW   transplantation; drug screening; drug discovery; RT-PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200027995-A1.
XX
PD   18-MAY-2000.
XX
PF   09-NOV-1999;   99WO-AU00990.
XX
PR   09-NOV-1998;   98AU-0007009.
PR   15-SEP-1999;   99AU-0002852.
XX
PA   (MONU ) UNIV MONASH.
PA   (UYSI-) UNIV SINGAPORE NAT.
PA   (HADA-) HADASIT MEDICAL RES SERVICES & DEV.
XX
PI   Reubinoff BE,  Pera MF,  Yee FC,  Trounson AO,  Bongso A;
XX
DR   WPI; 2000-376517/32.
XX
PT   Novel undifferentiated human embryonic stem cells which are useful as a
PT   source of novel gene products  -
XX
PS   Disclosure; Page 31; 56pp; English.
XX
CC   The present sequence is a RT-PCR primer for the human oct-4 transcript.
CC   It was used to measure oct-4 expression in differentiated and
CC   undifferentiated cells. These were all derived from human embryonic stem
CC   cells. Stem cells can be used to treat inherited diseases, to study the
CC   cellular and molecular biology of early human development, in functional
CC   genomics, to identify novel growth factors and to generate differentiated
CC   cells to use in transplantation, drug screening or drug discovery in
CC   vitro.
XX
SQ   Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 other;

  Query Match            10.1%;  Score 14;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.4e+02;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1656 GCACCAGGCTCACA 1669
              ||||||||||||||
Db          7 GCACCAGGCTCACA 20


RESULT 52
AAV91005/c
ID   AAV91005 standard; RNA; 17 BP.
XX
AC   AAV91005;
XX
DT   18-FEB-1999  (first entry)
XX
DE   Human C-raf target site nucleotide position 576.
XX
KW   Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
KW   target; substrate; catalyst; modulation; expression; Raf gene;
KW   delivery; screening; identification; synthesis; deprotection;
KW   purification; cancer; inflammation; psoriasis; non-hepatic ascites;
KW   infection; genetic drift; restenosis; rheumatoid arthritis; ss.
XX
OS   Homo sapiens.
XX
PN   WO9850530-A2.
XX
PD   12-NOV-1998.
```

```
Db         19 AACACCCGGCTCACAGATG 1


RESULT 48
AAD05958
ID   AAD05958 standard; DNA; 20 BP.
XX
AC   AAD05958;
XX
DT   31-JUL-2001  (first entry)
XX
DE   Human diacylglycerol kinase-zeta intron 18/exon 19 junction sequence.
XX
KW   Human; catalyst; diacylglycerol; DAG; phosphatidic acid; DAG modulator;
KW   diacylglycerol kinase zeta; DGK; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   intron          1..10
FT                   /*tag=  a
FT                   /number= 18
FT                   /partial
FT   exon            11..20
FT                   /*tag=  b
FT                   /number= 19
FT                   /partial
XX
PN   US6221658-B1.
XX
PD   24-APR-2001.
XX
PF   25-AUG-1999;   99US-0382911.
XX
PR   22-APR-1996;   96US-0016210.
PR   22-APR-1997;   97US-0841483.
XX
PA   (UTAH ) UNIV UTAH RES FOUND.
XX
PI   Prescott SM,  Bunting M,  Tang W,  Topham M;
XX
DR   WPI; 2001-327248/34.
XX
PT   New DNAs of the human diacylglycerol kinase, useful for modulating the
PT   levels of diacylglycerol kinase in cells to catalyze the conversion of
PT   diacylglycerol to phosphatidic acid, therefore increasing phosphatidic
PT   acid levels  -
XX
PS   Disclosure; Column 17-18; 74pp; English.
XX
CC   The patent discloses novel human diacylglycerol kinase (DGK) isoforms
CC   namely diacylglycerol kinase epsilon, diacylglycerol kinase zeta,
CC   diacylglycerol kinase zeta-2 and their corresponding cDNAs. Human
CC   diacylglycerol kinase DNA is useful for coding human diacylglycerol
CC   kinase, which is useful for catalysing the conversion of diacylglycerol
CC   to phosphatidic acid. In particular, the human diacylglycerol kinase
CC   and its DNA are useful for decreasing intracellular levels of diacyl-
CC   glycerol (DAG) and for increasing intracellular levels of phosphatidic
CC   acid in cells.
CC   The present DNA sequence is the exon/intron junction sequence of
CC   human diacylglycerol kinase (DGK) zeta gene.
XX
SQ   Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 other;

  Query Match            10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1686 CTCCTCCAGCGTGGTGGAA 1704
              | ||||||| ||| |||||
Db          2 CGCCTCCAGTGTGATGGAA 20


RESULT 49
AAD41746/c
ID   AAD41746 standard; DNA; 20 BP.
XX
AC   AAD41746;
XX
DT   30-OCT-2002  (first entry)
XX
DE   Human RECQL2 antisense oligonucleotide, ISIS #137526.
XX
KW   Antisense; RECQL2; Bloom's disorder; prophylaxis; infection; tumour;
KW   inflammation; therapy; human; phosphorothioate; ss.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..20
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate backbone"
FT   modified_base   1..5
FT                   /*tag=  b
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   16..20
FT                   /*tag=  c
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl nucleotides"
FT   modified_base   9
FT                   /*tag=  d
FT                   /mod_base= m5c
FT   modified_base   19..20
FT                   /*tag=  e
FT                   /mod_base= m5c
XX
PN   US6399378-B1.
XX
PD   04-JUN-2002.
XX
PF   01-MAR-2001; 2001US-0798096.
XX
PR   01-MAR-2001; 2001US-0798096.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Ward DT,  Watt AT;
XX
DR   WPI; 2002-535979/57.
XX
PT   Antisense compounds targeted to nucleic acids encoding RECQL2
PT   associated with Bloom's disorder, for modulating RECQL2 expression and
PT   treating diseases e.g. tumors associated with expression of the RECQL2
PT   in humans  -
XX
PS   Example 15; Column 44; 86pp; English.
XX
CC   The invention relates to antisense compounds targetted to nucleic acid
CC   encoding RECQL2 (gene associated with Bloom's disorder) to inhibit the
CC   expression of RECQL2. Antisense compounds of the invention are useful
CC   for treating diseases associated with expression of RECQL2, in humans.
CC   They are useful for diagnostics, therapeutics and as research reagent,
CC   e.g. prophylactically to prevent or delay infection, inflammation or
CC   tumour formation. They are also useful in antisense therapy. The
CC   present sequence is an antisense oligonucleotide targetted to human
CC   RECQL2 DNA.
XX
SQ   Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 other;

  Query Match            10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;
```

```
CC   activity for RNA. They comprise a texaphyrin metal complex bound to an
CC   internal linkage of an oligonucleotide or oligonucleotide analogue. The
CC   conjugates may be used for the destruction of retroviral RNA, messenger
CC   RNA, ribosomal RNA, RNA cofactors, transfer RNA, small nuclear RNA and
CC   small cytoplasmic RNA. They may be used for eliminating diseased or
CC   cancerous cells or tissues, in blood purification protocols (in vivo or
CC   in vitro), in antiviral treatments, or as diagnostic probes (e.g. in
CC   determination of the nucleotide sequence of RNA or to detect
CC   polymorphisms in RNA). Administration of the conjugates is, e.g., oral,
CC   topical or parenteral, especially topical or intravenous. The conjugates
CC   are especially effective under conditions where the concentration of RNA
CC   target exceeds that of available conjugate.
XX
SQ   Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAGCTG 1673
             | |||| ||||||||| ||
Db         19 AACACCCGGCTCACAGATG 1


RESULT 46
AAV99212/c
ID   AAV99212 standard; DNA; 20 BP.
XX
AC   AAV99212;
XX
DT   09-MAR-1999  (first entry)
XX
DE   Antisense primer for intron boundary mapping of DNA MeTase exon 35-36.
XX
KW   DNA methyltransferase; DNA MeTase; antisense oligonucleotide; human;
KW   cellular growth; tumour growth inhibition; silenced gene activation;
KW   beta thalassemia; sickle cell anemia; PCR primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9854313-A2.
XX
PD   03-DEC-1998.
XX
PF   29-MAY-1998;   98WO-IB01107.
XX
PR   17-DEC-1997;   97US-0069865.
PR   30-MAY-1997;   97US-0866340.
XX
PA   (UYMC-) UNIV MCGILL.
XX
PI   Bigey P,  Ramchandani S,  Szyf M;
XX
DR   WPI; 1999-059833/05.
XX
PT   New DNA methyltransferase nucleotide sequences - used particularly
PT   to develop antisense oligonucleotides for diagnostic and therapeutic
PT   purposes, particularly for inhibiting tumour growth
XX
PS   Example 8; Page 32; 108pp; English.
XX
CC   PCR primers AAV99163-220 were used to map the intron boundaries of
CC   the exons of DNA methyltransferase (DNA MeTase) genomic sequence.
CC   Antisense oligonucleotides which inhibit inhibit DNA MeTase expression
CC   can be derived from the genomic DNA MeTase sequence. The antisense
CC   oligonucleotides can be used in investigating the role of DNA MeTase
CC   in cellular growth. They can be administered at different points in
CC   the cell cycle, or in conjugation with promoters or inhibitors of cell
CC   growth to determine the role of DNA MeTase in the growth of the cell
CC   type of interest. The antisense oligonucleotides can also be used for
CC   inhibiting tumour growth in a mammal, or to activate silenced genes to
CC   provide a missing gene function. This ameliorates disease symptoms,
CC   e.g. in beta thalassemia and sickle cell anemia. The antisense
CC   oligonucleotides can also be used an analytical and diagnostic tools
CC   and a potentiators of transgenic plant and animal studies.
XX
SQ   Sequence 20 BP; 5 A; 9 C; 5 G; 1 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1681 GGTGTCTCCTCCAGCGTGG 1699
              || |||| |||| ||||||
Db         20 GGGGTCTGCTCCTGCGTGG 2


RESULT 47
AAZ88439/c
ID   AAZ88439 standard; DNA; 20 BP.
XX
AC   AAZ88439;
XX
DT   08-MAY-2000  (first entry)
XX
DE   Exemplary texaphyrin oligonucleotide conjugate SEQ ID NO:5.
XX
KW   Texaphyrin; metal complex; catalytic; RNA hydrolysis; virucide;
KW   antibacterial; cytostatic; antiinflammatory; antitumour;
KW   antiviral; ss.
XX
OS   Synthetic.
XX
PN   US6022959-A.
XX
PD   08-FEB-2000.
XX
PF   20-NOV-1997;   97US-0975522.
XX
PR   20-AUG-1996;   96US-0077185.
PR   20-AUG-1997;   97WO-US14682.
XX
PA   (PHAR-) PHARMACYCLICS INC.
XX
PI   Wright M,  Crofts SP,  Magda D;
XX
DR   WPI; 2000-160391/14.
XX
PT   Texaphyrin metal complex derivatized ribonucleic acids possessing
PT   hydrolytic cleavage activity against RNA are useful as e.g. antiviral,
PT   antibacterial, antitumor and antiinflammatory agents -
XX
PS   Example 4; Column 32; 30pp; English.
XX
CC   The present invention describes a conjugate with hydrolytic cleavage
CC   activity for ribonucleic acid (RNA), which comprises a texaphyrin metal
CC   complex bound to an internal linkage of an oligonucleotide or
CC   oligonucleotide analogue. AAZ88435 to AAZ88440 represent exemplary
CC   texaphyrin oligonucleotide conjugates used in the exemplification of the
CC   present invention. The novel conjugates have virucide, antibacterial,
CC   cytostatic and antiinflammatory properties, and are involved in RNA
CC   hydrolysis. The conjugates are useful for inhibiting the expression of
CC   a gene by targeted intracellular mRNA (messenger ribonucleic acid)
CC   hydrolysis. The conjugates have applications for anti-viral and
CC   anti-bacterial therapy as well as cancers and inflammatory responses
CC   caused by overexpression of certain proteins.
XX
SQ   Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAGCTG 1673
             | |||| ||||||||| ||
```

PI Wright M;
XX
DR WPI; 1995-036382/05.
XX
PT Texaphyrin metal complex mediated ester hydrolysis - esp. useful
PT for targeted intracellular hydrolysis of mRNA and for inhibiting
PT gene expression
XX
PS Disclosure; Fig 21; 125pp; English.
XX
CC AAQ91451-Q91457 are texaphyrin lanthanide metal DNA conjugates, which
CC are esp. useful for the targeted intracellular hydrolysis of mRNA;
CC inhibiting gene expression. They may also be used for the treament
CC of liver disease, as hormone regulation agents and as hydrolysis
CC reagents for the detoxification of alkyl phosphate esters.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 other;

Query Match 10.2%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1655 AGCACCAGGCTCACAGCTG 1673
| |||| ||||||||| ||
Db 19 AACACCCGGCTCACAGATG 1

RESULT 44
AAV07290/c
ID AAV07290 standard; DNA; 20 BP.
XX
AC AAV07290;
XX
DT 14-AUG-1998 (first entry)
XX
DE Oligonucleotide #4.
XX
KW Metallotexapyrin; dysprosium; europium; conjugate; RNase H;
KW antisense therapy; ss.
XX
OS Synthetic.
XX
PN US5763172-A.
XX
PD 09-JUN-1998.
XX
PF 07-JUN-1995; 95US-0486962.
XX
PR 07-JUN-1995; 95US-0485581.
PR 21-JAN-1992; 92US-0822964.
PR 09-JUN-1993; 93US-0075123.
PR 14-APR-1994; 94US-0227370.
PR 09-JUN-1994; 94WO-US06284.
PR 26-MAY-1995; 95US-0452261.
PR 07-JUN-1995; 95US-0486962.
XX
PA (PHAR-) PHARMACYCLICS INC.
PA (TEXA ) UNIV TEXAS SYSTEM.
XX
PI Dow WC, Magda D, Miller RA, Sessler JL, Wright M;
XX
DR WPI; 1998-347306/30.
XX
PT Enhancing therapeutic activity of oligonucleotides in cells - using
PT conjugate comprising metallotexaphyrin, which hydrolyses phosphate
PT ester bonds of RNA, and oligo-nucleotide, which binds to targetted
PT RNA
XX
PS Disclosure; Columns 37-38; 34pp; English.
XX
CC The invention relates to a method of enhancing the therapeutic activity
CC of oligonucleotides in cells. It comprises contacting a targeted
CC intracellular RNA in a cell with a metallotexaphyrin-oligonucleotide
CC conjugate. The contact is carried out under physiological conditions for
CC a time sufficient to hydrolyse the phosphate ester bond of the targeted
CC RNA. The metallotexaphyrin of the conjugate has catalytic activity for
CC phosphate ester bond hydrolysis. The oligonucleotide of the conjugate
CC has complementary binding affinity to the targeted RNA. The conjugate
CC may be used in antisense therapies for treating, e.g. cancer, viral
CC infections, autoimmune diseases and restenosis. The conjugate may also
CC be used as hydrolysis reagents for the detoxification of di- and
CC trialkyl phosphate esters, which are used in solvents, insecticides and
CC chemical nerve gases. The metallotexaphyrin complex enhances the
CC therapeutic activity of the oligonucleotide, not only by facilitating
CC cellular uptake of the oligonucleotide but also by hydrolysing target
CC RNA within the cell, independent of RNase H. Attachment to the complex
CC may also cause the oligonucleotide to take on some of the pharmacodynamic
CC an biodistribution properties of the texaphyrin, such as selective
CC localisation in tumours. The present oligonucleotide is shown in the
CC specification.
XX
SQ Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 other;

Query Match 10.2%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 1.3e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1655 AGCACCAGGCTCACAGCTG 1673
| |||| ||||||||| ||
Db 19 AACACCCGGCTCACAGATG 1

RESULT 45
AAV07037/c
ID AAV07037 standard; DNA; 20 BP.
XX
AC AAV07037;
XX
DT 08-JUL-1998 (first entry)
XX
DE Texaphyrin oligonucleotide conjugate.
XX
KW Texaphyrin oligonucleotide conjugate; dysprosium; metal complex;
KW hydrolytic cleavage activity; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1
FT /*tag= a
FT /note= "A texaphyrin dysprosium metal complex, bound to
FT cytosine via a linking phosphate group"
XX
PN WO9807733-A1.
XX
PD 26-FEB-1998.
XX
PF 20-AUG-1997; 97WO-US14682.
XX
PR 20-AUG-1996; 96US-0700277.
XX
PA (PHAR-) PHARMACYCLICS INC.
XX
PI Crofts SP, Magda D, Wright M;
XX
DR WPI; 1998-179049/16.
XX
PT New conjugates which have hydrolytic cleavage activity for RNA -
PT comprise a texaphyrin metal complex bound to an internal linkage of
PT an oligonucleotide
XX
PS Example 4; Page 51; 77pp; English.
XX
CC This sequence is shown in the specification. THe invention relates
CC to texaphyrin oligonucleotide conjugates which have hydrolytic cleavage

```
PN   WO9429316-A2.
XX
PD   22-DEC-1994.
XX
PF   09-JUN-1994;   94WO-US06284.
XX
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Hemmi GW,  Iverson B,  Kral VA,  Magda D;
PI   Miller RA,  Mody T, Ross KL,  Sessler JL,  Smith DA;
PI   Wright M;
XX
DR   WPI; 1995-036382/05.
XX
PT   Texaphyrin metal complex mediated ester hydrolysis - esp. useful
PT   for targeted intracellular hydrolysis of mRNA and for inhibiting
PT   gene expression
XX
PS   Example 7; Fig 9; 125pp; English.
XX
CC   AAQ80879-Q80892 are texaphyrin lanthanide metal DNA conjugates, which
CC   are esp. useful for the targeted intracellular hydrolysis of mRNA;
CC   inhibiting gene expression. They may also be used for the treament
CC   of liver disease, as hormone regulation agents and as hydrolysis
CC   reagents for the detoxification of alkyl phosphate esters.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAGCTG 1673
              | |||| |||||||||| ||
Db         19 AACACCCGGCTCACAGATG 1


RESULT 42
AAQ80880/c
ID   AAQ80880 standard; DNA; 20 BP.
XX
AC   AAQ80880;
XX
DT   25-MAR-2003  (updated)
DT   30-AUG-1995  (first entry)
XX
DE   Europium (III) texaphyrin (EuTx) DNA conjugate 9B.
XX
KW   Europium (III) texaphyrin (EuTx) DNA conjugate 9B; liver disease;
KW   targeted intracellular mRNA hydrolysis; gene expression inhibition;
KW   hormone regulation; hydrolysis reagents; alkyl phosphate esters;
KW   detoxification; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "EuTx-NH(CH2)6-PO4-cytosine"
XX
PN   WO9429316-A2.
XX
PD   22-DEC-1994.
XX
PF   09-JUN-1994;   94WO-US06284.
XX
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Hemmi GW,  Iverson B,  Kral VA,  Magda D;
PI   Miller RA,  Mody T, Ross KL,  Sessler JL,  Smith DA;
PI   Wright M;
XX
DR   WPI; 1995-036382/05.
XX
PT   Texaphyrin metal complex mediated ester hydrolysis - esp. useful
PT   for targeted intracellular hydrolysis of mRNA and for inhibiting
PT   gene expression
XX
PS   Example 7; Fig 9; 125pp; English.
XX
CC   AAQ80879-Q80892 are texaphyrin lanthanide metal DNA conjugates, which
CC   are esp. useful for the targeted intracellular hydrolysis of mRNA;
CC   inhibiting gene expression. They may also be used for the treament
CC   of liver disease, as hormone regulation agents and as hydrolysis
CC   reagents for the detoxification of alkyl phosphate esters.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 20 BP; 2 A; 4 C; 8 G; 6 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1655 AGCACCAGGCTCACAGCTG 1673
              | |||| |||||||||| ||
Db         19 AACACCCGGCTCACAGATG 1


RESULT 43
AAQ91455/c
ID   AAQ91455 standard; DNA; 20 BP.
XX
AC   AAQ91455;
XX
DT   25-MAR-2003  (updated)
DT   30-AUG-1995  (first entry)
XX
DE   Dysprosium (III) texaphyrin (DyTx) DNA conjugate.
XX
KW   Dysprosium (III) texaphyrin (DyTx) DNA conjugate; liver disease;
KW   targeted intracellular mRNA hydrolysis; gene expression inhibition;
KW   hormone regulation; hydrolysis reagents; alkyl phosphate esters;
KW   detoxification; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "DyTx-NH(CH2)6-PO4-cytosine"
XX
PN   WO9429316-A2.
XX
PD   22-DEC-1994.
XX
PF   09-JUN-1994;   94WO-US06284.
XX
PR   09-JUN-1993;   93US-0075123.
PR   14-APR-1994;   94US-0227370.
XX
PA   (PHAR-) PHARMACYCLICS INC.
PA   (TEXA ) UNIV TEXAS SYSTEM.
XX
PI   Dow WC,  Hemmi GW,  Iverson B,  Kral VA,  Magda D;
PI   Miller RA,  Mody T, Ross KL,  Sessler JL,  Smith DA;
```

```
CC   and feed industry, detecting comprises scanning (using e.g. a scanning
CC   electron microscope and infrared microscope) the support at the
CC   particular sites and identifying if ligation of the oligonucleotide probe
CC   sets occurred and correlating (using a computer) identified ligation to a
CC   presence or absence of the target nucleotide sequences. ABI82074 to
CC   ABI97546 represent oligonucleotide sequences used in the exemplification
CC   of the present invention.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 other;

  Query Match             10.4%;  Score 14.4;  DB 1;  Length 20;
  Best Local Similarity   93.8%;  Pred. No. 1.2e+02;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1728 GAGATTGGCTCCCAAC 1743
              ||||||||||| ||||
Db         18 GAGATTGGCTCGCAAC 3


RESULT 39
AAT08224/c
ID   AAT08224 standard; DNA; 20 BP.
XX
AC   AAT08224;
XX
DT   23-MAY-1996  (first entry)
XX
DE   p142, PCR primer used for isolation of antisense HBV strain X region.
XX
KW   Hepatitis B virus; X region; antisense; antibody; vector; diagnosis;
KW   hepatoma; hepatitis; antiviral; anticancer; transcription; ss.
XX
OS   Synthetic.
XX
PN   WO9527788-A1.
XX
PD   19-OCT-1995.
XX
PF   10-APR-1995;   95WO-JP00700.
XX
PR   11-APR-1994;   94JP-0095458.
XX
PA   (DAIN-) DAINABOT CO LTD.
XX
PI   Shikata T,  Uchida T;
XX
DR   WPI; 1995-366392/47.
XX
PT   Antisense DNA sequence of X region of new hepatitis B strain,
PT   related peptide(s) and antibodies  - useful for diagnosis and
PT   investigation of HBV infection
XX
PS   Example 2; Page 22; 61pp; Japanese.
XX
CC   AAT08224-53 are PCR primers used for the isolation and amplification
CC   of 2 antisense DNA sequences derived from the X region of a
CC   new strain of hepatitis B. The DNA codes for a viral peptide ASXP.
CC   The ASXP peptide and antibodies recognising it are useful in the
CC   diagnosis of hepatitis caused by the virus, in the investigation
CC   of transcription activated and enhanced by the presence of the ASXP
CC   peptide, and in the development of effective antiviral and anticancer
CC   drugs for the treatment of hepatitis and hepatoma.
XX
SQ   Sequence 20 BP; 4 A; 1 C; 12 G; 3 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTCCCTATC 1754
              | ||||||||||||||  ||
Db         19 CCCCCAACTCCTCCCAGTC 1


RESULT 40
AAQ81567/c
ID   AAQ81567 standard; DNA; 20 BP.
XX
AC   AAQ81567;
XX
DT   04-SEP-1995  (first entry)
XX
DE   Hepatitis B virus polypeptide cDNA PCR primer p142.
XX
KW   Hepatitis B virus; HBV; polypeptide; diagnosis and detection;
KW   PCR primer p142; ss.
XX
OS   Synthetic.
XX
PN   JP06321991-A.
XX
PD   22-NOV-1994.
XX
PF   14-MAY-1993;   93JP-0113136.
XX
PR   14-MAY-1993;   93JP-0113136.
XX
PA   (MITU ) MITSUBISHI KASEI CORP.
XX
DR   WPI; 1995-041293/06.
XX
PT   Polypeptide derived from type B hepatitis virus and gene to code
PT   it - used in diagnosis of type B hepatitis virus
XX
PS   Example 2; Page 5; 13pp; Japanese.
XX
CC   AAQ81567 and AAQ81568 are a pair of primers for the PCR amplfication
CC   of the cDNAs encoding the hepatitis B virus (HBV) polypeptides
CC   described in AAR68865-R68871. The polypeptides or their fragments
CC   can be used in the diagnosis and detection of HBV.
XX
SQ   Sequence 20 BP; 4 A; 1 C; 12 G; 3 T; 0 other;

  Query Match             10.2%;  Score 14.2;  DB 1;  Length 20;
  Best Local Similarity   84.2%;  Pred. No. 1.3e+02;
  Matches   16;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1736 CTCCCAACTCCTCCCTATC 1754
              | ||||||||||||||  ||
Db         19 CCCCCAACTCCTCCCAGTC 1


RESULT 41
AAQ80879/c
ID   AAQ80879 standard; DNA; 20 BP.
XX
AC   AAQ80879;
XX
DT   25-MAR-2003  (updated)
DT   30-AUG-1995  (first entry)
XX
DE   Europium (III) texaphyrin (EuTx) DNA conjugate 9A.
XX
KW   Europium (III) texaphyrin (EuTx) DNA conjugate 9A; liver disease;
KW   targeted intracellular mRNA hydrolysis; gene expression inhibition;
KW   hormone regulation; hydrolysis reagents; alkyl phosphate esters;
KW   detoxification; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base   7
FT                   /*tag=  a
FT                   /mod_base= OTHER
FT                   /note= "EuTx-NH(CH2)6 alkylamidated thymidine"
XX
```

PT Constructing strains for identifying gene products as effective targets
PT for therapeutic intervention, by inactivating in the strain one allele
PT of a gene and placing other allele of the gene under conditional
PT expression -
XX
PS Claim 36; SEQ ID NO 5725; 167pp + Sequence Listing; English.
XX
CC The invention relates to constructing (M1) a strain of diploid fungal
CC cells in which both alleles of a gene are modified, comprising modifying
CC one allele by insertion or replacement by a cassette having an
CC expressible selectable marker and modifying other allele by
CC recombination, of a promoter replacement fragment with a heterologous
CC promoter, so that expression of the second allele is regulated by the
CC promoter. (M1) is useful for constructing a strain of diploid fungal
CC cells in which both alleles of a gene are modified. The diploid fungal
CC cells having both alleles modified are useful for identifying a gene that
CC is essential to the survival or growth of a fungus, a gene that
CC contributes to the virulence and/or pathogenicity of a fungus, a gene
CC that contributes to the resistance of a diploid fungus to an antifungal
CC agent, an antifungal agent that inhibits the growth of a diploid fungus
CC and for identifying a therapeutic agent for treatment of a mammalian
CC disease. (M1) is useful for identifying a compound which modulates the
CC activity of a gene product, preferably enzymatic activity, carbon
CC compound catabolism, biosynthetic, transporter, transcriptional,
CC translational, signal transduction, DNA replication and cell division
CC activity. The method is useful for identifying a compound having the
CC ability to inhibit growth or proliferation of C. albicans cells and for
CC treating infection by C. albicans. The present sequence is that of a PCR
CC primer used in the method of the invention.
CC Note: The sequence data for this patent is not represented in the printed
CC specification but is based on sequence information supplied to Derwent by
CC the European Patent Office.
XX
SQ Sequence 20 BP; 4 A; 9 C; 3 G; 4 T; 0 other;

Query Match 10.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1737 TCCCAACTCCTCCCTA 1752
||||||||||||||| |
Db 1 TCCCAACTCCTCCCAA 16

RESULT 37
ABV73609/c
ID ABV73609 standard; DNA; 20 BP.
XX
AC ABV73609;
XX
DT 10-JAN-2003 (first entry)
XX
DE S. albulus plasmid pNO33 related primer #1.
XX
KW Plasmid; epsilon-polylysine; pNO33; PCR; primer; ss.
XX
OS Synthetic.
XX
PN JP2002233380-A.
XX
PD 20-AUG-2002.
XX
PF 08-FEB-2001; 2001JP-0031958.
XX
PR 08-FEB-2001; 2001JP-0031958.
XX
PA (CHCC ) CHISSO CORP.
XX
DR WPI; 2002-736476/80.
XX
PT A nucleic acid molecule derived from a plasmid of Streptomyces albulus
PT -
XX
PS Example 3; Page 4; 17pp; Japanese.
XX
CC The invention relates to a DNA molecule which is derived from plasmid
CC pNO33 of Streptomyces albulus. In the scope of the invention, a microbe
CC host may be transformed by the vector. The vector is used for the
CC preparation of epsilon-polylysine. The current sequence represents an
CC S. albulus plasmid pNO33 related PCR primer sequence.
XX
SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 other;

Query Match 10.4%; Score 14.4; DB 1; Length 20;
Best Local Similarity 93.8%; Pred. No. 1.2e+02;
Matches 15; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1636 GGGCTTGTAGCAGAAG 1651
||||||||||||||| |
Db 17 GGGCTTGTAGCAGATG 2

RESULT 38
ABI93783/c
ID ABI93783 standard; DNA; 20 BP.
XX
AC ABI93783;
XX
DT 16-FEB-2002 (first entry)
XX
DE Capture oligonucleptide Zip ID#870 oligo #9.
XX
KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
KW ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity;
KW cancer; oncogene; tumour suppressor; human papillomavirus; forensic;
KW environmental monitoring; food industry; feed industry; ss.
XX
OS Synthetic.
XX
PN WO200179548-A2.
XX
PD 25-OCT-2001.
XX
PF 04-APR-2001; 2001WO-US10958.
XX
PR 14-APR-2000; 2000US-197271P.
XX
PA (CORR ) CORNELL RES FOUND INC.
XX
PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
XX
DR WPI; 2002-034366/04.
XX
PT Designing capture oligonucleotide probes for use on a support to which
PT complementary oligonucleotides hybridize with little mismatch -
XX
PS Example 5; Fig 29; 300pp; English.
XX
CC The present invention describes a method (M1) for designing capture
CC oligonucleotide probes (I) for use on a support to which complementary
CC oligonucleotide probes (II) will hybridise with little mismatch, where
CC (I) have melting temperatures within a narrow range. The method is useful
CC for detecting infectious diseases caused by bacterial infectious agents
CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
CC Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus,
CC Epstein-Barr virus and polio virus, and parasitic infectious agents
CC selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus
CC medinesis. The method is also useful for detecting genetic diseases such
CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
CC involved in DNA amplification, replication, recombination or repair, the
CC cancer is specifically associated with a gene selected from BRCA1 gene,
CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
CC method is also used for environmental monitoring, forensics and the food

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PT   cardiovascular and autoimmune diseases -
XX
PS   Example 3; Page 911; 977pp; English.
XX
CC   The invention relates to an isolated nucleic acid from a human gene
CC   encoding aminopeptidase P (XPNEP2), bradykinin receptor B1 (BDKRB1),
CC   tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein
CC   1 (KLK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
CC   2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
CC   polymorphic position. Also included are (1) a probe that hybridises to a
CC   polymorphic position as provided in the detailed summary of single
CC   nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
CC   sequence; (2) analysing (M1) at least one nucleic acid sample comprising
CC   obtaining the sample from one or more individuals and determining the
CC   nucleic acid sequence at one or more polymorphic positions in a gene
CC   encoding a protein selected from the group above; (3) constructing (M2)
CC   haplotypes using the genes comprising grouping at least two nucleic
CC   acids; (4) identifying (M3) an individual at risk of developing a
CC   disorder upon administration of an ACE inhibitor and/or vasopeptidase
CC   inhibitor using the polymorphic data; (5) a library of nucleic acids,
CC   each of which comprises one or more polymorphic positions within a gene
CC   encoding a human protein selected from the group above; and (6)
CC   genotyping (M4) an individual comprising obtaining a nucleic acid sample,
CC   determining the nucleotide present in at least one polymorphic position,
CC   and comparing at least one position with a known data set. The genes,
CC   (M1, M2, M3 and M4) and compositions are useful for detecting,
CC   diagnosing, treating, preventing various disorders such as angioedaema
CC   and diseases which involve angiogenesis like haemangiomas, tumours,
CC   sarcomas, Crohn's disease, trachomas, and cardiovascular diseases like
CC   angina pectoris, hypertension, heart failure, myocardial infarction,
CC   ventricular hypertrophy, vascular diseases, aneurysm, embolism,
CC   thrombosis, coronary artery disease, arteriosclerosis and/or
CC   atherosclerosis, and hypersensitivity reactions, sepsis, autoimmune
CC   diseases, inflammatory arthritis, cancer, wounds, viral, bacterial or
CC   fungal infection, Chronic obstructive pulmonary disease (COPD) and
CC   enterocolitis (many other diseases and disorders are listed in the
CC   specification). The polynucleotides are also useful for chromosome
CC   identification. Antibodies against the proteins may be utilised for
CC   immunophenotyping of cell lines and biological samples. The present
CC   sequence is a genotyping PCR primer for the gene encoding
CC   one of the proteins listed above.
XX
SQ   Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 other;

  Query Match             10.6%;  Score 14.8;  DB 1;  Length 20;
  Best Local Similarity   88.9%;  Pred. No. 98;
  Matches   16;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1669 AGCTGGAACCCTGGTGTC 1686
              |||||||||| |||| ||
Db         19 AGCTGGAACCTTGGTCTC 2


RESULT 35
ABL58444
ID   ABL58444 standard; DNA; 18 BP.
XX
AC   ABL58444;
XX
DT   30-JUL-2002  (first entry)
XX
DE   Cyp-C probe generating primer.
XX
KW   Embryoid body; stem cel; MAMA; gynecological; medicine; RT-PCR; primer;
KW   galectin-3; cyp-C; ss.
XX
OS   Synthetic.
XX
PN   WO200165928-A1.
XX
PD   13-SEP-2001.
XX
PF   09-MAR-2000; 2000WO-IB00246.
XX
PR   09-MAR-2000; 2000WO-IB00246.
XX
PA   (CHIC/) CHICHEPORTICHE Y.
XX
PI   Chicheportiche Y,  Ody C;
XX
DR   WPI; 2002-055092/07.
XX
PT   Promoting (M1)  the success rate of in vitro production of embryoid
PT   bodies from mammalian embryonic stem cells useful for regenerative
PT   medicine comprises increasing the quantity of MAMA  -
XX
PS   Disclosure; Page 14; 32pp; English.
XX
CC   The invention relates to a method of promoting the success rate of in
CC   vitro production of embryoid bodies from mammalian embryonic stem cells
CC   by increasing the quantity of MAMA or its homologues. MAMA is useful as
CC   an agent of differentiation in an in vitro culture medium of mammalian
CC   embryonic stem cells. An in vitro culture medium which contain MAMA and
CC   the methods are useful for promoting the success rate of in vitro
CC   production of embryoid bodies from embryonic stem cells which contain
CC   MAMA. MAMA, cultures and vectors containing MAMA and the methods may be
CC   used for regenerative medicine. MAMA may be used as a promoter of the
CC   implantation of eggs obtained in vitro and to promote the successful
CC   attachment of in vitro-fertilized eggs to the uterine membrane. The
CC   present sequence represents a primer used for generating cyp-C specific
CC   probes by RT-PCR, for northern hybridisation analysis of MAMA, galectin-3
CC   and cyp-C mRNAs in transfected embryonic stem cells.
XX
SQ   Sequence 18 BP; 1 A; 4 C; 6 G; 7 T; 0 other;

  Query Match             10.4%;  Score 14.4;  DB 1;  Length 18;
  Best Local Similarity   93.8%;  Pred. No. 97;
  Matches   15;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy       1672 TGGAACCCTGGTGTCT 1687
              |||| ||||||||||
Db          2 TGGAGCCCTGGTGTCT 17


RESULT 36
ABZ31506
ID   ABZ31506 standard; DNA; 20 BP.
XX
AC   ABZ31506;
XX
DT   30-JAN-2003  (first entry)
XX
DE   Candida albicans GRACE strain PCR primer SEQ ID NO 5725.
XX
KW   Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis;
KW   signal transduction; DNA replication; cell division; growth;
KW   proliferation; Candida albicans; fungicide; antifungal; PCR; primer; ss.
XX
OS   Candida albicans.
XX
PN   WO200253728-A2.
XX
PD   11-JUL-2002.
XX
PF   26-DEC-2001; 2001WO-US49486.
XX
PR   29-DEC-2000; 2000US-259128P.
PR   20-FEB-2001; 2001US-0792024.
PR   22-AUG-2001; 2001US-314050P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Roemer T,  Jiang B,  Boone C,  Bussey H,  Ohlsen KL;
XX
DR   WPI; 2002-566694/60.
XX
```

CC levels of CETP, specifically familial hypercholesterolaemia,
CC atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC diabetes, transplant, atherectomy and angioplastic restenosis. By
CC inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC and a corresponding increase in HDL levels). The HH ribozymes can also
CC be used diagnostically to study genetic drift and mutations in diseased
CC cells, and to detect CETP mRNA. As the HH ribozymes target specific
CC regions of the CETP gene, they have low non-specific activity.
XX
SQ Sequence 15 BP; 4 A; 2 C; 6 G; 3 U; 0 other;

Query Match 10.8%; Score 15; DB 1; Length 15;
Best Local Similarity 80.0%; Pred. No. 53;
Matches 12; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1637 GGCTTGTAGCAGAAG 1651
||||:|:||||||||
Db 1 GGCUUGUAGCAGAAG 15

RESULT 33
AAT49813
ID AAT49813 standard; RNA; 15 BP.
XX
AC AAT49813;
XX
DT 18-MAR-1997 (first entry)
XX
DE Human CETP HH ribozyme target sequence #1666.
XX
KW Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW LDL; ss.
XX
OS Homo sapiens.
XX
PN WO9620279-A1.
XX
PD 04-JUL-1996.
XX
PF 11-DEC-1995; 95WO-US16000.
XX
PR 23-DEC-1994; 94US-0363240.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (WARN ) WARNER LAMBERT CO.
XX
PI Bisgaier C, Couture L, McSwiggen J, Pape M, Stinchcomb D;
XX
DR WPI; 1996-321852/32.
XX
PT New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT - useful for preventing or treating initial development, progression
PT or regression of vascular diseases, esp. familial
PT hypercholesterolaemia
XX
PS Claim 4; Page 32; 72pp; English.
XX
CC AAT49608-T49863 represent target sequences for the human cholesterol
CC ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC lipid transfer between plasma lipoproteins. The numbering of the targets
CC refers to the position of the cleavage site in full length CETP. The
CC ribozyme binds to 5 nucleotides either side of this site, provided the
CC sequence UH is immediately upstream. The ribozymes are able to cleave
CC mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC transport (RCT) pathway can be inhibited (or eliminated) thereby
CC preventing the reduction in size density of the high density lipoproteins
CC (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC The ribozymes can be used to treat conditions associated with abnormal
CC levels of CETP, specifically familial hypercholesterolaemia,
CC atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC diabetes, transplant, atherectomy and angioplastic restenosis. By
CC inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC and a corresponding increase in HDL levels). The HH ribozymes can also
CC be used diagnostically to study genetic drift and mutations in diseased
CC cells, and to detect CETP mRNA. As the HH ribozymes target specific
CC regions of the CETP gene, they have low non-specific activity.
XX
SQ Sequence 15 BP; 3 A; 6 C; 4 G; 2 U; 0 other;

Query Match 10.8%; Score 15; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 53;
Matches 13; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1659 CCAGGCTCACAGCTG 1673
||||||:||||||:|
Db 1 CCAGGCUCACAGCUG 15

RESULT 34
ABS60987/c
ID ABS60987 standard; DNA; 20 BP.
XX
AC ABS60987;
XX
DT 05-NOV-2002 (first entry)
XX
DE Human genotyping PCR primer #140.
XX
KW Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer;
KW BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH;
KW kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy;
KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
KW cardiovascular disease; angina pectoris; hypertension; heart failure;
KW myocardial infarction; ventricular hypertrophy; vascular disease;
KW aneurysm; embolism; thrombosis; coronary artery disease; angioedaema;
KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR;
KW autoimmune disease; inflammatory arthritis; cancer; wound; genotyping;
KW viral infection; bacterial infection; fungal infection; COPD;
KW Chronic obstructive pulmonary disease; enterocolitis.
XX
OS Homo sapiens.
XX
PN WO200261131-A2.
XX
PD 08-AUG-2002.
XX
PF 03-DEC-2001; 2001WO-US47235.
XX
PR 04-DEC-2000; 2000US-251015P.
PR 23-JAN-2001; 2001US-263678P.
PR 02-MAR-2001; 2001US-273037P.
XX
PA (BRIM ) BRISTOL-MYERS SQUIBB CO.
PA (TSUC/) TSUCHIHASHI Z.
PA (HUIL/) HUI L.
XX
PI Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
PI Swanson BN, Powell JR;
XX
DR WPI; 2002-619265/66.
XX
PT New isolated nucleic acid with at least one polymorphic position,
PT useful for detecting, diagnosing and treating disorders such as
PT angioedema, cancer, viral, bacterial or fungal infection,

```
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 4 A; 6 C; 2 G; 3 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 53;
  Matches   12;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1750 CTATCCTAAAGGCCC 1764
              |:|:||:||||||||
Db          1 CUAUCCUAAAGGCCC 15


RESULT 31
AAT49809
ID   AAT49809 standard; RNA; 15 BP.
XX
AC   AAT49809;
XX
DT   18-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1641.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 2 A; 2 C; 7 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1634 TGGGGCTTGTAGCAG 1648
              :|||||::|:|||||
Db          1 UGGGGCUUGUAGCAG 15


RESULT 32
AAT49811
ID   AAT49811 standard; RNA; 15 BP.
XX
AC   AAT49811;
XX
DT   18-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1644.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
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Qy       1745 CCTCCCTATCCTAAA 1759
              ||:|||:|:||:|||
Db          1 CCUCCCUAUCCUAAA 15


RESULT 29
AAT49839
ID   AAT49839 standard; RNA; 15 BP.
XX
AC   AAT49839;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1754.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 4 A; 5 C; 2 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1747 TCCCTATCCTAAAGG 1761
              :|||:|:||:|||||
Db          1 UCCCUAUCCUAAAGG 15


RESULT 30
AAT49841
ID   AAT49841 standard; RNA; 15 BP.
XX
AC   AAT49841;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1757.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
```

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ID   AAT49835 standard; RNA; 15 BP.
XX
AC   AAT49835;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1748.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins. The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP. The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream. The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 8 C; 0 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1741 AACTCCTCCCTATCC 1755
              |||:||:|||:|:||
Db          1 AACUCCUCCCUAUCC 15
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RESULT 28
AAT49837
ID   AAT49837 standard; RNA; 15 BP.
XX
AC   AAT49837;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1752.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins. The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP. The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream. The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 4 A; 7 C; 0 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 6 C; 2 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1731 ATTGGCTCCCAACTC 1745
              |::|||:||||||:|
Db          1 AUUGGCUCCCAACUC 15


RESULT 26
AAT49833
ID   AAT49833 standard; RNA; 15 BP.
XX
AC   AAT49833;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1745.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 9 C; 0 G; 3 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 53;
  Matches   12;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCCTA 1752
              ||||||:||:|:|:|
Db          1 CCCAACUCCUCCCUA 15


RESULT 27
AAT49835
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OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 5 A; 1 C; 6 G; 3 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   80.0%;  Pred. No. 53;
  Matches   12;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1712 TAGGAGTACGGAGAT 1726
              :|||||:|||||||:
Db          1 UAGGAGUACGGAGAU 15


RESULT 24
AAT49829
ID   AAT49829 standard; RNA; 15 BP.
XX
AC   AAT49829;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1733.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 2 A; 4 C; 5 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1726 TGGAGATTGGCTCCC 1740
              :|||||::|||:|||
Db          1 UGGAGAUUGGCUCCC 15


RESULT 25
AAT49831
ID   AAT49831 standard; RNA; 15 BP.
XX
AC   AAT49831;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1738.
XX
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PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 0 C; 7 G; 5 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   66.7%;  Pred. No. 53;
  Matches   10;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1705 GTTGGGTTAGGAGTA 1719
              |::|||::|||||:|
Db          1 GUUGGGUUAGGAGUA 15


RESULT 22
AAT49825
ID   AAT49825 standard; RNA; 15 BP.
XX
AC   AAT49825;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1713.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins.  The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP.  The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream.  The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA.  By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis.  By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels).  The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA.  As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 1 C; 6 G; 5 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   66.7%;  Pred. No. 53;
  Matches   10;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1706 TTGGGTTAGGAGTAC 1720
              ::|||::|||||:||
Db          1 UUGGGUUAGGAGUAC 15


RESULT 23
AAT49827
ID   AAT49827 standard; RNA; 15 BP.
XX
AC   AAT49827;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1719.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
```

```
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins. The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP. The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream. The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis. By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels). The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA. As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 1 A; 6 C; 4 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1684 GTCTCCTCCAGCGTG 1698
              |:|:||:||||||:|
Db          1 GUCUCCUCCAGCGUG 15


RESULT 20
AAT49821
ID   AAT49821 standard; RNA; 15 BP.
XX
AC   AAT49821;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1707.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins. The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP. The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream. The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis. By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels). The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA. As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 3 A; 0 C; 7 G; 5 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   66.7%;  Pred. No. 53;
  Matches   10;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1700 TGGAAGTTGGGTTAG 1714
              :|||||::|||::||
Db          1 UGGAAGUUGGGUUAG 15


RESULT 21
AAT49823
ID   AAT49823 standard; RNA; 15 BP.
XX
AC   AAT49823;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1712.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
```

```
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins. The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP. The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream. The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis. By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels). The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA. As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 1 A; 6 C; 3 G; 5 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   66.7%;  Pred. No. 53;
  Matches   10;  Conservative    5;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1679 CTGGTGTCTCCTCCA 1693
              |:||:|:|:||:|||
Db          1 CUGGUGUCUCCUCCA 15


RESULT 18
AAT49817
ID   AAT49817 standard; RNA; 15 BP.
XX
AC   AAT49817;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1688.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
XX
PT   New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT   - useful for preventing or treating initial development, progression
PT   or regression of vascular diseases, esp. familial
PT   hypercholesterolaemia
XX
PS   Claim 4; Page 32; 72pp; English.
XX
CC   AAT49608-T49863 represent target sequences for the human cholesterol
CC   ester transfer protein (CETP) hammerhead (HH) ribozymes (see
CC   AAT49881-T50137). CETP is a 74 kD glycoprotein that facilitates neutral
CC   lipid transfer between plasma lipoproteins. The numbering of the targets
CC   refers to the position of the cleavage site in full length CETP. The
CC   ribozyme binds to 5 nucleotides either side of this site, provided the
CC   sequence UH is immediately upstream. The ribozymes are able to cleave
CC   mRNA from the gene encoding CETP, thereby blocking synthesis and/or
CC   expression of the mRNA. By inhibiting CETP, the reverse cholesterol
CC   transport (RCT) pathway can be inhibited (or eliminated) thereby
CC   preventing the reduction in size density of the high density lipoproteins
CC   (HDL), prolonging HDL half life, and therefore increasing HDL levels.
CC   The ribozymes can be used to treat conditions associated with abnormal
CC   levels of CETP, specifically familial hypercholesterolaemia,
CC   atherosclerosis, peripheral vascular disease, hyperbetalipoproteinaemia,
CC   hypoalphalipoproteinaemia, dyslipidaemia, vascular complications of
CC   diabetes, transplant, atherectomy and angioplastic restenosis. By
CC   inhibiting CETP, the levels of HDL and low density lipoproteins (LDL),
CC   and the HDL:LDL ratio are favourably altered (a decrease in LDL levels,
CC   and a corresponding increase in HDL levels). The HH ribozymes can also
CC   be used diagnostically to study genetic drift and mutations in diseased
CC   cells, and to detect CETP mRNA. As the HH ribozymes target specific
CC   regions of the CETP gene, they have low non-specific activity.
XX
SQ   Sequence 15 BP; 1 A; 6 C; 4 G; 4 U; 0 other;

  Query Match             10.8%;  Score 15;  DB 1;  Length 15;
  Best Local Similarity   73.3%;  Pred. No. 53;
  Matches   11;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1681 GGTGTCTCCTCCAGC 1695
              ||:|:|:||:|||||
Db          1 GGUGUCUCCUCCAGC 15


RESULT 19
AAT49819
ID   AAT49819 standard; RNA; 15 BP.
XX
AC   AAT49819;
XX
DT   07-MAR-1997  (first entry)
XX
DE   Human CETP HH ribozyme target sequence #1691.
XX
KW   Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW   neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW   reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW   familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW   peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW   angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW   LDL; ss.
XX
OS   Homo sapiens.
XX
PN   WO9620279-A1.
XX
PD   04-JUL-1996.
XX
PF   11-DEC-1995;   95WO-US16000.
XX
PR   23-DEC-1994;   94US-0363240.
XX
PA   (RIBO-) RIBOZYME PHARM INC.
PA   (WARN ) WARNER LAMBERT CO.
XX
PI   Bisgaier C,  Couture L,  McSwiggen J,  Pape M,  Stinchcomb D;
XX
DR   WPI; 1996-321852/32.
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XX
PF 10-SEP-1997; 97WO-US16037.
XX
PR 30-OCT-1996; 96US-0029679.
PR 10-SEP-1996; 96US-0025719.
PR 02-OCT-1996; 96US-0028056.
XX
PA (ARCH-) ARCH DEV CORP.
XX
PI Bell GI, Furuta H, Horikawa Y, Kaisaki PJ, Menzel S;
PI Oda N, Yamagata K;
XX
DR WPI; 1998-271667/24.
XX
PT Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and
PT 1-beta - useful for detecting susceptibility for non-insulin
PT dependent diabetes, especially maturity-onset diabetes of the young
XX
PS Example 8; Page 146; 363pp; English.
XX
CC This is a forward PCR primer designed for use with a reverse primer
CC (see AAV52706) in the PCR amplification of the 4-2 exon of the human
CC hepatocyte nuclear factor-1 beta (HNF-1 beta) TCF2 gene (see
CC AAV52730). Mutations of the HNF-1 beta gene have been identified by
CC amplifying (see AAV52693-716) and sequencing the appropriate exon.
CC The invention concerns the identification of genes responsible for
CC non-insulin dependent diabetes mellitus (NIDDM) for use in
CC diagnostics and therapeutics. It demonstrates that the MODY4
CC (maturity-onset diabetes of the young) locus is the HNF-1 beta
CC gene. Analysis of mutations in the HNF-1 beta gene can be
CC diagnostic for diabetes.
XX
SQ Sequence 22 BP; 8 A; 9 C; 3 G; 2 T; 0 other;

Query Match 11.7%; Score 16.2; DB 1; Length 22;
Best Local Similarity 85.7%; Pred. No. 61;
Matches 18; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1658 ACCAGGCTCACAGCTGGAACC 1678
||||| ||||||| |||||
Db 2 ACCAGACTCACAGCCTGAACC 22

RESULT 16
AAD24930
ID AAD24930 standard; DNA; 20 BP.
XX
AC AAD24930;
XX
DT 12-MAR-2002 (first entry)
XX
DE Antisense primer, to analyse human beta IG-H3 gene expression modulation.
XX
KW Human; growth inhibitory gene; retinoid; retinoic acid response element;
KW RARE site; therapy; promyelocytic leukaemia; cancer chemoprevention;
KW cytostatic; secreted cell adhesion protein beta IG-H3 gene; PCR primer;
KW ss.
XX
OS Homo sapiens.
XX
PN WO200192578-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US17161.
XX
PR 26-MAY-2000; 2000US-207535P.
XX
PA (UNII ) UNIV ILLINOIS FOUND.
XX
PI Roninson IB, Dokmanovic M, Chang B;
XX
DR WPI; 2002-075474/10.
XX
PT Expression construct encoding cellular genes, under control of a
PT promoter regulated by retinoids and cells comprising the construct for
PT identifying compounds that induce expression of the genes useful in
PT treating cancer -
XX
PS Example 1; Page 19; 64pp; English.
XX
CC The patent discloses growth inhibitory genes induced by retinoids. The
CC invention also relates to recombinant expression constructs that express
CC a reporter gene under the transcriptional control of a promoter for a
CC gene which is expressed by retinoid induction. The promoter does not
CC contain a retinoic acid response elements (RARE) site. The invention
CC further relates to reagents and methods for identifying compounds other
CC than retinoids that modulate the expression of cellular genes. These
CC compounds are useful for treating cancers such as promyelocytic leukaemia
CC and cancer chemoprevention. The present DNA sequence is a PCR primer
CC which is used for analysing human secreted cell adhesion protein beta
CC IG-H3 gene expression modulation by treatment with retinoic acid.
XX
SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 other;

Query Match 10.9%; Score 15.2; DB 1; Length 20;
Best Local Similarity 85.0%; Pred. No. 81;
Matches 17; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1653 CAAGCACCAGGCTCACAGCT 1672
|| |||| ||||||||| ||
Db 1 CATGCACAAGGCTCACATCT 20

RESULT 17
AAT49815
ID AAT49815 standard; RNA; 15 BP.
XX
AC AAT49815;
XX
DT 07-MAR-1997 (first entry)
XX
DE Human CETP HH ribozyme target sequence #1686.
XX
KW Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW LDL; ss.
XX
OS Homo sapiens.
XX
PN WO9620279-A1.
XX
PD 04-JUL-1996.
XX
PF 11-DEC-1995; 95WO-US16000.
XX
PR 23-DEC-1994; 94US-0363240.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (WARN ) WARNER LAMBERT CO.
XX
PI Bisgaier C, Couture L, McSwiggen J, Pape M, Stinchcomb D;
XX
DR WPI; 1996-321852/32.
XX
PT New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT - useful for preventing or treating initial development, progression
PT or regression of vascular diseases, esp. familial
PT hypercholesterolaemia
XX
PS Claim 4; Page 32; 72pp; English.
XX

```
  Query Match           12.4%;  Score 17.2;  DB 1;  Length 22;
  Best Local Similarity  86.4%;  Pred. No. 39;
  Matches   19;  Conservative    0;  Mismatches    3;  Indels    0;  Gaps    0;

Qy       1738 CCCAACTCCTCCCTATCCTAAA 1759
              ||||||||||||| |||| ||
Db          1 CCCAACTCCTCCCAGTCCTTAA 22


RESULT 13
AAX22550/c
ID   AAX22550 standard; mRNA; 17 BP.
XX
AC   AAX22550;
XX
DT   21-MAY-1999  (first entry)
XX
DE   Human CETP RNA fragment #5.
XX
KW   CETP; cholesteryl ester transfer protein; inhibitor; therapy; treatment;
KW   surface plasmon resonance; vascular disease; pathogenic; atherosclerosis;
KW   human; ss.
XX
OS   Homo sapiens.
XX
PN   DE19731609-A1.
XX
PD   18-FEB-1999.
XX
PF   23-JUL-1997;   97DE-1031609.
XX
PR   23-JUL-1997;   97DE-1031609.
XX
PA   (BOEH ) BOEHRINGER INGELHEIM PHARMA KG.
XX
PI   Budzinksi R,  Krist B,  Mark M,  Mueller P;
XX
DR   WPI; 1999-143775/13.
XX
PT   RNA transcript of human cholesteryl ester transfer protein gene -
PT   useful in drug screening assays, especially for atherosclerosis
XX
PS   Disclosure; Page 13; 24pp; German.
XX
CC   This invention describes the isolation of a transcript of the human
CC   cholesteryl ester transfer protein (CETP) gene having a 5' untranslated
CC   region including a regulatory sequence. The invention also describes
CC   a method (a) for identifying substances capable of inhibiting CETP gene
CC   expression, comprising measuring the translation rate of the above
CC   transcript in the presence of a test substance, (2) a test substance
CC   capable of inhibiting CETP gene expression, (3) an antisense
CC   oligonucleotide capable of binding to the 5' untranslated region of the
CC   above transcript and (4) a method based on surface plasmon resonance for
CC   measuring the binding of a substance to a nucleic acid. The test
CC   substance of (2) and the oligonucleotide of (3) are useful for
CC   prophylactic or therapeutic treatment of vascular diseases in which CETP
CC   has a pathogenic role, especially atherosclerosis.
XX
SQ   Sequence 17 BP; 2 A; 8 C; 1 G; 6 U; 0 other;

  Query Match           12.2%;  Score 17;  DB 1;  Length 17;
  Best Local Similarity  100.0%;  Pred. No. 27;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1715 GAGTACGGAGATGGAGA 1731
              |||||||||||||||||
Db         17 GAGTACGGAGATGGAGA 1


RESULT 14
AAI99829
ID   AAI99829 standard; DNA; 21 BP.
XX
AC   AAI99829;
XX
DT   28-JAN-2002  (first entry)
XX
DE   Human G protein-coupled receptor protein TGR5 PCR primer SEQ ID NO 5.
XX
KW   Human; TGR5; G protein-coupled receptor protein; cerebroprotective;
KW   cardiant; immunomodulator; cytostatic; antiinflammatory; antidiabetic;
KW   cancer; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200177325-A1.
XX
PD   18-OCT-2001.
XX
PF   12-APR-2001; 2001WO-JP03143.
XX
PR   12-APR-2000; 2000JP-0110765.
XX
PA   (TAKE ) TAKEDA CHEM IND LTD.
XX
PI   Miwa M,  Matsui H,  Shintani Y;
XX
DR   WPI; 2002-010910/01.
XX
PT   Human brain-originated G protein-coupled receptor protein TGR5,
PT   applicable in diagnosis and developing drugs for diseases of e.g.
PT   central nervous system and digestive organs, inflammation, cancer and
PT   diabetes  -
XX
PS   Example 2; Page 98; 104pp; Japanese.
XX
CC   The invention relates to a novel human G protein-coupled receptor protein
CC   TGR5 and the encoding cDNA with cerebroprotective, cardiant,
CC   immunomodulator, cytostatic, antiinflammatory and antidiabetic activity.
CC   The protein, encoded DNA and anti-TGR5 antibody are applicable in
CC   diagnosis and developing drugs for diseases of central nervous system and
CC   circulatory organs, inflammation, cancer and diabetes. The present
CC   sequence is that of a TGR5 PCR primer of the invention.
XX
SQ   Sequence 21 BP; 2 A; 9 C; 2 G; 8 T; 0 other;

  Query Match           12.1%;  Score 16.8;  DB 1;  Length 21;
  Best Local Similarity  90.0%;  Pred. No. 43;
  Matches   18;  Conservative    0;  Mismatches    2;  Indels    0;  Gaps    0;

Qy       1732 TTGGCTCCCAACTCCTCCCT 1751
              |||||||||||||| |||| |
Db          1 TTGGCTCCCAACTTCTCCTT 20


RESULT 15
AAV52705
ID   AAV52705 standard; DNA; 22 BP.
XX
AC   AAV52705;
XX
DT   21-DEC-1998  (first entry)
XX
DE   Hepatocyte nuclear factor 1 beta gene exon 4-2 forward PCR primer.
XX
KW   Hepatocyte nuclear factor 1 beta; HNF-1 beta; MODY4; human;
KW   transcription factor; maturity onset diabetes of the young; TCF2;
KW   diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.
XX
OS   Synthetic.
OS   Homo sapiens.
XX
PN   WO9811254-A1.
XX
PD   19-MAR-1998.
```

PT abnormal lipid or cholesterol metabolism, atherosclerosis or
PT cardiovascular disease -
XX
PS Claim 3; Page 97; 114pp; English.
XX
CC The invention relates to new antisense compounds targeted to a nucleic
CC acid molecule encoding human cholesteryl ester transfer protein,
CC specifically hybridises with it and inhibits the expression of human
CC cholesteryl ester transfer protein. The compound is useful for preparing
CC a composition for treating abnormal lipid or cholesterol metabolism,
CC atherosclerosis or cardiovascular disease. The present sequence
CC represents a human cholesteryl ester transfer protein, antisense
CC oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 other;

Query Match 14.4%; Score 20; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 8.9;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1750 CTATCCTAAAGGCCCACTGG 1769
||||||||||||||||||||
Db 20 CTATCCTAAAGGCCCACTGG 1

RESULT 11
AAT50642
ID AAT50642 standard; RNA; 18 BP.
XX
AC AAT50642;
XX
DT 10-MAR-1997 (first entry)
XX
DE Human CETP hairpin ribozyme target sequence #1669.
XX
KW Hairpin ribozyme; cholesterol ester transfer protein; mRNA cleavage;
KW neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy;
KW reverse cholesterol transport; high density lipoprotein; therapy; CETP;
KW familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia;
KW peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor;
KW angioplastic restenosis; low density lipoprotein; diabetes; HDL; human;
KW LDL; ss.
XX
OS Homo sapiens.
XX
PN WO9620279-A1.
XX
PD 04-JUL-1996.
XX
PF 11-DEC-1995; 95WO-US16000.
XX
PR 23-DEC-1994; 94US-0363240.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (WARN ) WARNER LAMBERT CO.
XX
PI Bisgaier C, Couture L, McSwiggen J, Pape M, Stinchcomb D;
XX
DR WPI; 1996-321852/32.
XX
PT New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA
PT - useful for preventing or treating initial development, progression
PT or regression of vascular diseases, esp. familial
PT hypercholesterolaemia
XX
PS Claim 4; Page 54; 72pp; English.
XX
CC AAT50595-T50642 represent target sequences for the human cholesterol
CC ester transfer protein (CETP) hairpin ribozymes (see AAT50547-T50594).
CC CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer
CC between plasma lipoproteins. The numbering of the targets refers to the
CC position of the cleavage site in full length CETP. The ribozyme then
CC binds to 4-6 nucleotides 5', and a variable number 3' of this site. The
CC ribozymes are able to cleave mRNA from the gene encoding CETP, thereby
CC blocking synthesis and/or expression of the mRNA. By inhibiting CETP,
CC the reverse cholesterol transport (RCT) pathway can be inhibited (or
CC eliminated) thereby preventing the reduction in size density of the high
CC density lipoproteins (HDL), prolonging HDL half life, and therefore
CC increasing HDL levels. The ribozymes can be used to treat conditions
CC associated with abnormal levels of CETP, specifically atherosclerosis,
CC peripheral vascular disease, hyperbetalipoproteinaemia, dyslipidaemia,
CC familial hypercholesterolaemia, hypoalphalipoproteinaemia, vascular
CC complications of diabetes, transplant, atherectomy and angioplastic
CC restenosis. By inhibiting CETP, the levels of HDL and low density
CC lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a
CC decrease in LDL levels, and a corresponding increase in HDL levels). The
CC ribozymes can also be used diagnostically to study genetic drift and
CC mutations in diseased cells, and to detect CETP mRNA. As the ribozymes
CC target specific regions of the CETP gene, they have low non-specific
CC activity.
XX
SQ Sequence 18 BP; 4 A; 7 C; 4 G; 3 U; 0 other;

Query Match 12.9%; Score 18; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 19;
Matches 15; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1663 GCTCACAGCTGGAACCCT 1680
||:||||||:|||||||:
Db 1 GCUCACAGCUGGAACCCU 18

RESULT 12
AAX37644
ID AAX37644 standard; DNA; 22 BP.
XX
AC AAX37644;
XX
DT 08-JUL-1999 (first entry)
XX
DE HBV detecting primer 8.
XX
KW Detection; HBV; real time; PCR; reporter; fluorescent; primer;
KW quencher; fluorescence resonance energy transfer; ss.
XX
OS Synthetic.
OS Hepatitis B virus.
XX
PN JP11103897-A.
XX
PD 20-APR-1999.
XX
PF 30-SEP-1997; 97JP-0282612.
XX
PR 30-SEP-1997; 97JP-0282612.
XX
PA (SRLS-) SRL KK.
XX
DR WPI; 1999-305860/26.
XX
PT New primers and probes - for measurement of an Herpes B Virus (HBV)
PT gene by a real time detecting PCR
XX
PS Example 2; Page 8; 12pp; Japanese.
XX
CC This invention describes a method for the measurement of an HBV gene by
CC a real time detecting PCR. The invention also describes a method for the
CC measurement of an HBV gene by a real time detecting PCR in which a
CC reporter fluorescent colour and a quencher fluorescent colour are
CC combined to an oligonucleotide, the fluorescence of said reporter
CC fluorescent colour is controlled by fluorescence resonance energy
CC transfer when reporter fluorescent colour is combined to the same probe
CC as quencher fluorescent colour. The method can measure an HBV exactly in
CC a high sensitivity.
XX
SQ Sequence 22 BP; 5 A; 11 C; 1 G; 5 T; 0 other;

```
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Claim 3; Page 97; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 other;

  Query Match             14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1693 AGCGTGGTGGAAGTTGGGTT 1712
              ||||||||||||||||||||
Db         20 AGCGTGGTGGAAGTTGGGTT 1


RESULT 9
ABX12219/c
ID   ABX12219 standard; DNA; 20 BP.
XX
AC   ABX12219;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #40.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..6
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   1..20
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate nucleotides; all cytidine
FT                         residues are 5-methylcytidines"
FT   modified_base   15..20
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Claim 3; Page 97; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 4 A; 9 C; 1 G; 6 T; 0 other;

  Query Match             14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1714 GGAGTACGGAGATGGAGATT 1733
              ||||||||||||||||||||
Db         20 GGAGTACGGAGATGGAGATT 1


RESULT 10
ABX12220/c
ID   ABX12220 standard; DNA; 20 BP.
XX
AC   ABX12220;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #41.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..6
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   1..20
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate nucleotides; all cytidine
FT                         residues are 5-methylcytidines"
FT   modified_base   15..20
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
```

```
FT                              residues are 5-methylcytidines"
FT   modified_base    15..20
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Claim 3; Page 96; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 5 A; 9 C; 1 G; 5 T; 0 other;

  Query Match             14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1701 GGAAGTTGGGTTAGGAGTAC 1720
              ||||||||||||||||||||
Db         20 GGAAGTTGGGTTAGGAGTAC 1


RESULT 7
ABX12217/c
ID   ABX12217 standard; DNA; 20 BP.
XX
AC   ABX12217;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #38.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..6
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    1..20
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate nucleotides; all cytidine
FT                          residues are 5-methylcytidines"
FT   modified_base    15..20
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Claim 3; Page 97; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 other;

  Query Match             14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1638 GCTTGTAGCAGAAGGCAAGC 1657
              ||||||||||||||||||||
Db         20 GCTTGTAGCAGAAGGCAAGC 1


RESULT 8
ABX12218/c
ID   ABX12218 standard; DNA; 20 BP.
XX
AC   ABX12218;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #39.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..6
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base    1..20
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate nucleotides; all cytidine
FT                          residues are 5-methylcytidines"
FT   modified_base    15..20
FT                    /mod_base= OTHER
FT                    /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
```

```
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..6
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   1..20
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate nucleotides; all cytidine
FT                        residues are 5-methylcytidines"
FT   modified_base   15..20
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Claim 3; Page 96; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 other;

  Query Match             14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1631 GGATGGGGCTTGTAGCAGAA 1650
              ||||||||||||||||||||
Db         20 GGATGGGGCTTGTAGCAGAA 1


RESULT 5
ABX12199/c
ID   ABX12199 standard; DNA; 20 BP.
XX
AC   ABX12199;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #20.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..6
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   1..20
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate nucleotides; all cytidine
FT                        residues are 5-methylcytidines"
FT   modified_base   15..20
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Claim 3; Page 96; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, antisense
CC   oligonucleotide of the invention.
XX
SQ   Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 other;

  Query Match             14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1671 CTGGAACCCTGGTGTCTCCT 1690
              ||||||||||||||||||||
Db         20 CTGGAACCCTGGTGTCTCCT 1


RESULT 6
ABX12200/c
ID   ABX12200 standard; DNA; 20 BP.
XX
AC   ABX12200;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #21.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base   1..6
FT                   /mod_base= OTHER
FT                   /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT   modified_base   1..20
FT                   /mod_base= OTHER
FT                   /note= "Phosphorothioate nucleotides; all cytidine
```

```
CC   primers related to the human CETP DNA, used during the course of the
CC   invention.
XX
SQ   Sequence 21 BP; 5 A; 6 C; 6 G; 4 T; 0 other;

  Query Match           15.1%;  Score 21;  DB 1;  Length 21;
  Best Local Similarity  100.0%;  Pred. No. 6.1;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1665 TCACAGCTGGAACCCTGGTGT 1685
              |||||||||||||||||||||
Db         21 TCACAGCTGGAACCCTGGTGT 1


RESULT 2
ABT13031/c
ID   ABT13031 standard; DNA; 20 BP.
XX
AC   ABT13031;
XX
DT   30-JAN-2003  (first entry)
XX
DE   Human cholesterol ester transfer protein PCR primer (SNP specific) #12.
XX
KW   Human; PCR; primer; ss; gene therapy; single nucleotide polymorphism;
KW   cytochrome C oxidase subunit VIb; COX6B; high serum cholesterol; GPI-1;
KW   N-acetylglucosaminyl transferase component; cardiovascular disease; HDL;
KW   glycosylphosphatidylinositol-1; SNP; low serum high density lipoprotein.
XX
OS   Homo sapiens.
XX
PN   WO200272604-A2.
XX
PD   19-SEP-2002.
XX
PF   05-MAR-2002; 2002WO-US06728.
XX
PR   09-MAR-2001; 2001US-0802640.
XX
PA   (SEQU-) SEQUENOM INC.
XX
PI   Braun A,  Bansal A,  Kleyn PW;
XX
DR   WPI; 2002-750478/81.
XX
PT   Detecting the presence or absence of an allelic variant of a
PT   polymorphic region of COX6B and/or GPI-1 gene, useful for detecting a
PT   predisposition to high serum cholesterol, low serum HDL and
PT   cardiovascular disease  -
XX
PS   Disclosure; Page 30; 199pp; English.
XX
CC   The invention comprises methods of detecting the presence or absence of
CC   at least one allelic variant of a polymorphic region of a gene associated
CC   with cardiovascular disease. The invention specifically relates to
CC   detecting the region of a cytochrome C oxidase subunit VIb (COX6B) gene
CC   that is associated with high serum cholesterol, or the region of the
CC   N-acetylglucosaminyl transferase component glycosylphosphatidylinositol-1
CC   (GPI-1) gene that is associated with low serum high density lipoprotein
CC   (HDL). The methods of the invention are useful for detecting a
CC   predisposition to high serum cholesterol, low serum HDL and
CC   cardiovascular disease. The methods are also useful for elucidating
CC   pathological pathways, developing diagnostic assays and new drug
CC   therapies for such disorders. The present DNA sequence represents a PCR
CC   primer used to amplify a human gene that is associated with high serum
CC   cholesterol, low serum HDL and/or cardiovascular disease.
XX
SQ   Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 other;

  Query Match           14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity  100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1639 CTTGTAGCAGAAGGCAAGCA 1658
              ||||||||||||||||||||
Db         20 CTTGTAGCAGAAGGCAAGCA 1


RESULT 3
ABX12175/c
ID   ABX12175 standard; DNA; 20 BP.
XX
AC   ABX12175;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, reverse PCR primer.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; PCR; primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO2003014306-A2.
XX
PD   20-FEB-2003.
XX
PF   05-AUG-2002; 2002WO-US24919.
XX
PR   08-AUG-2001; 2001US-0925139.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Crooke RM,  Graham MJ,  Nero PS,  Wancewicz E;
XX
DR   WPI; 2003-248014/25.
XX
PT   New antisense compound, useful for preparing a composition for treating
PT   abnormal lipid or cholesterol metabolism, atherosclerosis or
PT   cardiovascular disease  -
XX
PS   Example 13; Page 93; 114pp; English.
XX
CC   The invention relates to new antisense compounds targeted to a nucleic
CC   acid molecule encoding human cholesteryl ester transfer protein,
CC   specifically hybridises with it and inhibits the expression of human
CC   cholesteryl ester transfer protein. The compound is useful for preparing
CC   a composition for treating abnormal lipid or cholesterol metabolism,
CC   atherosclerosis or cardiovascular disease. The present sequence
CC   represents a human cholesteryl ester transfer protein, PCR primer.
XX
SQ   Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 other;

  Query Match           14.4%;  Score 20;  DB 1;  Length 20;
  Best Local Similarity  100.0%;  Pred. No. 8.9;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1695 CGTGGTGGAAGTTGGGTTAG 1714
              ||||||||||||||||||||
Db         20 CGTGGTGGAAGTTGGGTTAG 1


RESULT 4
ABX12198/c
ID   ABX12198 standard; DNA; 20 BP.
XX
AC   ABX12198;
XX
DT   16-MAY-2003  (first entry)
XX
DE   Human cholesteryl ester transfer protein, antisense oligo #19.
XX
KW   Human; cholesteryl ester transfer protein; lipid metabolism;
KW   cholesterol metabolism; atherosclerosis; cardiovascular disease;
KW   antisense; probe; ss.
```

| | | | | | | |
|---|---|---|---|---|---|---|
| | 691 | 10.4 | 7.5 | 13 | 1 | ABF74436 | Oligonucleotide SE |
| c | 692 | 10.4 | 7.5 | 13 | 1 | ABF74437 | Oligonucleotide SE |
| c | 693 | 10.4 | 7.5 | 13 | 1 | ABF79386 | Oligonucleotide SE |
| | 694 | 10.4 | 7.5 | 13 | 1 | ABF79387 | Oligonucleotide SE |
| c | 695 | 10.4 | 7.5 | 13 | 1 | ABF82122 | Oligonucleotide SE |
| | 696 | 10.4 | 7.5 | 13 | 1 | ABF82123 | Oligonucleotide SE |
| c | 697 | 10.4 | 7.5 | 13 | 1 | ABF87482 | Oligonucleotide SE |
| | 698 | 10.4 | 7.5 | 13 | 1 | ABF87483 | Oligonucleotide SE |
| | 699 | 10.4 | 7.5 | 13 | 1 | ABF90782 | Oligonucleotide SE |
| c | 700 | 10.4 | 7.5 | 13 | 1 | ABF90783 | Oligonucleotide SE |
| | 701 | 10.4 | 7.5 | 13 | 1 | ABF92684 | Oligonucleotide SE |
| c | 702 | 10.4 | 7.5 | 13 | 1 | ABF92685 | Oligonucleotide SE |
| | 703 | 10.4 | 7.5 | 13 | 1 | ABF95706 | Oligonucleotide SE |
| c | 704 | 10.4 | 7.5 | 13 | 1 | ABF95707 | Oligonucleotide SE |
| | 705 | 10.4 | 7.5 | 13 | 1 | ABF95708 | Oligonucleotide SE |
| c | 706 | 10.4 | 7.5 | 13 | 1 | ABF95709 | Oligonucleotide SE |
| | 707 | 10.4 | 7.5 | 13 | 1 | ABH00386 | Oligonucleotide SE |
| c | 708 | 10.4 | 7.5 | 13 | 1 | ABH00387 | Oligonucleotide SE |
| | 709 | 10.4 | 7.5 | 13 | 1 | ABH00390 | Oligonucleotide SE |
| c | 710 | 10.4 | 7.5 | 13 | 1 | ABH00391 | Oligonucleotide SE |
| | 711 | 10.4 | 7.5 | 13 | 1 | ABH00760 | Oligonucleotide SE |
| c | 712 | 10.4 | 7.5 | 13 | 1 | ABH00761 | Oligonucleotide SE |
| | 713 | 10.4 | 7.5 | 13 | 1 | ABH12820 | Oligonucleotide SE |
| c | 714 | 10.4 | 7.5 | 13 | 1 | ABH12821 | Oligonucleotide SE |
| c | 715 | 10.4 | 7.5 | 13 | 1 | ABH13554 | Oligonucleotide SE |
| | 716 | 10.4 | 7.5 | 13 | 1 | ABH13555 | Oligonucleotide SE |
| c | 717 | 10.4 | 7.5 | 13 | 1 | ABH13558 | Oligonucleotide SE |
| | 718 | 10.4 | 7.5 | 13 | 1 | ABH13559 | Oligonucleotide SE |
| c | 719 | 10.4 | 7.5 | 13 | 1 | ABH15230 | Oligonucleotide SE |
| | 720 | 10.4 | 7.5 | 13 | 1 | ABH15231 | Oligonucleotide SE |
| c | 721 | 10.4 | 7.5 | 13 | 1 | ABH26444 | Oligonucleotide SE |
| | 722 | 10.4 | 7.5 | 13 | 1 | ABH26445 | Oligonucleotide SE |
| c | 723 | 10.4 | 7.5 | 13 | 1 | ABH35974 | Oligonucleotide SE |
| | 724 | 10.4 | 7.5 | 13 | 1 | ABH35975 | Oligonucleotide SE |
| c | 725 | 10.4 | 7.5 | 13 | 1 | ABH36660 | Oligonucleotide SE |
| | 726 | 10.4 | 7.5 | 13 | 1 | ABH36661 | Oligonucleotide SE |
| | 727 | 10.4 | 7.5 | 13 | 1 | ABH36974 | Oligonucleotide SE |
| c | 728 | 10.4 | 7.5 | 13 | 1 | ABH36975 | Oligonucleotide SE |
| c | 729 | 10.4 | 7.5 | 13 | 1 | ABH37502 | Oligonucleotide SE |
| | 730 | 10.4 | 7.5 | 13 | 1 | ABH37503 | Oligonucleotide SE |
| c | 731 | 10.4 | 7.5 | 13 | 1 | ABH42002 | Oligonucleotide SE |
| | 732 | 10.4 | 7.5 | 13 | 1 | ABH42003 | Oligonucleotide SE |
| | 733 | 10.4 | 7.5 | 13 | 1 | ABH47622 | Oligonucleotide SE |
| c | 734 | 10.4 | 7.5 | 13 | 1 | ABH47623 | Oligonucleotide SE |
| c | 735 | 10.4 | 7.5 | 13 | 1 | ABH50618 | Oligonucleotide SE |
| | 736 | 10.4 | 7.5 | 13 | 1 | ABH50619 | Oligonucleotide SE |
| c | 737 | 10.4 | 7.5 | 13 | 1 | ABH61554 | Oligonucleotide SE |
| | 738 | 10.4 | 7.5 | 13 | 1 | ABH61555 | Oligonucleotide SE |
| | 739 | 10.4 | 7.5 | 13 | 1 | ABH63202 | Oligonucleotide SE |
| c | 740 | 10.4 | 7.5 | 13 | 1 | ABH63203 | Oligonucleotide SE |
| c | 741 | 10.4 | 7.5 | 14 | 1 | AAQ78441 | TGF-beta gene phos |
| c | 742 | 10.4 | 7.5 | 14 | 1 | AAV99069 | Human EGF-R target |
| | 743 | 10.4 | 7.5 | 14 | 1 | AAA17659 | Aryl hydrocarbon n |
| | 744 | 10.4 | 7.5 | 14 | 1 | AAA26158 | Oestrogen receptor |
| c | 745 | 10.2 | 7.3 | 15 | 1 | AAT49813 | Human CETP HH ribo |
| | 746 | 10 | 7.2 | 20 | 1 | AAQ80879 | Europium (III) tex |
| | 747 | 10 | 7.2 | 20 | 1 | AAQ80880 | Europium (III) tex |
| | 748 | 10 | 7.2 | 20 | 1 | AAQ91455 | Dysprosium (III) t |
| | 749 | 10 | 7.2 | 20 | 1 | AAV07290 | Oligonucleotide #4 |
| | 750 | 10 | 7.2 | 20 | 1 | AAV07037 | Texaphyrin oligonu |
| | 751 | 10 | 7.2 | 20 | 1 | AAZ88439 | Exemplary texaphyr |
| c | 752 | 9.8 | 7.1 | 13 | 1 | ABF43820 | Oligonucleotide SE |
| | 753 | 9.8 | 7.1 | 13 | 1 | ABF43821 | Oligonucleotide SE |
| | 754 | 9.6 | 6.9 | 16 | 1 | AAQ29795 | A allele probe VP5 |
| c | 755 | 9.6 | 6.9 | 20 | 1 | ABZ31506 | Candida albicans G |
| c | 756 | 9.4 | 6.8 | 13 | 1 | ABC32492 | Oligonucleotide SE |
| | 757 | 9.4 | 6.8 | 13 | 1 | ABC32493 | Oligonucleotide SE |
| c | 758 | 9.4 | 6.8 | 13 | 1 | ABF18154 | Oligonucleotide SE |
| | 759 | 9.4 | 6.8 | 13 | 1 | ABF18155 | Oligonucleotide SE |
| | 760 | 9.4 | 6.8 | 20 | 1 | ABX12199 | Human cholesteryl |
| | 761 | 9.4 | 6.8 | 20 | 1 | AAD41746 | Human RECQL2 antis |
| c | 762 | 9.2 | 6.6 | 16 | 1 | AAS56873 | Validation ribozym |
| | 763 | 9.2 | 6.6 | 17 | 1 | AAX75159 | Mouse flt-1 VEGF r |
| | 764 | 9.2 | 6.6 | 20 | 1 | AAT08224 | p142, PCR primer u |
| | 765 | 9.2 | 6.6 | 20 | 1 | AAQ81567 | Hepatitis B virus |
| | 766 | 9.2 | 6.6 | 20 | 1 | ABT23628 | Stabilising reagen |
| c | 767 | 9.2 | 6.6 | 22 | 1 | AAX37644 | HBV detecting prim |
| | 768 | 9 | 6.5 | 12 | 1 | ABH71789 | Oligonucleotide pr |
| c | 769 | 9 | 6.5 | 12 | 1 | ABI06503 | Oligonucleotide pr |
| c | 770 | 9 | 6.5 | 13 | 1 | ABC65198 | Oligonucleotide SE |
| | 771 | 9 | 6.5 | 13 | 1 | ABC65199 | Oligonucleotide SE |
| c | 772 | 9 | 6.5 | 13 | 1 | ABF11506 | Oligonucleotide SE |
| | 773 | 9 | 6.5 | 13 | 1 | ABF11507 | Oligonucleotide SE |
| | 774 | 9 | 6.5 | 13 | 1 | ABF43730 | Oligonucleotide SE |
| c | 775 | 9 | 6.5 | 13 | 1 | ABF43731 | Oligonucleotide SE |
| | 776 | 9 | 6.5 | 17 | 1 | ABV91050 | Human POSHL1 scann |
| | 777 | 9 | 6.5 | 20 | 1 | ABV73609 | S. albulus plasmid |
| c | 778 | 9 | 6.5 | 20 | 1 | AAA58421 | Oct-4 transcript R |
| c | 779 | 9 | 6.5 | 21 | 1 | AAI99829 | Human G protein-co |
| | 780 | 8.8 | 6.3 | 12 | 1 | ABH96992 | Oligonucleotide pr |
| c | 781 | 8.8 | 6.3 | 12 | 1 | ABI69091 | Oligonucleotide pr |
| | 782 | 8.8 | 6.3 | 12 | 1 | ABI69250 | Oligonucleotide pr |
| c | 783 | 8.8 | 6.3 | 12 | 1 | ABI81529 | Oligonucleotide pr |
| c | 784 | 8.8 | 6.3 | 15 | 1 | AAT49827 | Human CETP HH ribo |
| | 785 | 8.8 | 6.3 | 15 | 1 | AAL45302 | Human KCNB1 gene a |
| | 786 | 8.8 | 6.3 | 15 | 1 | AAF69487 | Human IL4Ralpha ge |
| | 787 | 8.8 | 6.3 | 19 | 1 | AAA82923 | cdk4 ribozyme bind |
| | 788 | 8.8 | 6.3 | 19 | 1 | AAH58085 | Cell-cycle depende |
| | 789 | 8.6 | 6.2 | 13 | 1 | ABC24272 | Oligonucleotide SE |
| c | 790 | 8.6 | 6.2 | 13 | 1 | ABC24273 | Oligonucleotide SE |

ALIGNMENTS

RESULT 1
AAI66686/c
ID AAI66686 standard; DNA; 21 BP.
XX
AC AAI66686;
XX
DT 07-JAN-2002 (first entry)
XX
DE Human CETP DNA related PCR primer.
XX
KW CETP; arteriosclerosis; cholesterol ester transfer protein; HDL;
KW high density lipoprotein; human; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200171032-A1.
XX
PD 27-SEP-2001.
XX
PF 23-MAR-2001; 2001WO-JP02327.
XX
PR 24-MAR-2000; 2000JP-0084264.
XX
PA (BMLB-) BML INC.
XX
PI Nagano M, Ito M, Sagehashi Y, Hattori H, Egashira T, Yamashita S;
PI Matsuzawa Y;
XX
DR WPI; 2001-611516/70.
XX
PT Determining a risk factor for arteriosclerosis comprises detecting
PT mutations in genes for cholesterol ester transfer protein. -
XX
PS Disclosure; Page 21; 58pp; Japanese.
XX
CC The invention relates to detecting the risk factor for arteriosclerosis
CC in a subject that involves detecting mutations in the gene for
CC cholesterol ester transfer protein (CETP) related to the degree of risk
CC of arteriosclerosis. The mutant proteins alter the level of HDL in the
CC blood. The high frequency mutations can be detected for prevention and
CC treatment of arteriosclerosis. Sequences AAI66655-91 represent PCR

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| 545 | 10.4 | 7.5 | 13 | 1 | ABC31002 | Oligonucleotide SE |
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| 549 | 10.4 | 7.5 | 13 | 1 | ABC31788 | Oligonucleotide SE |
| c 550 | 10.4 | 7.5 | 13 | 1 | ABC31789 | Oligonucleotide SE |
| 551 | 10.4 | 7.5 | 13 | 1 | ABC31792 | Oligonucleotide SE |
| c 552 | 10.4 | 7.5 | 13 | 1 | ABC31793 | Oligonucleotide SE |
| 553 | 10.4 | 7.5 | 13 | 1 | ABC31800 | Oligonucleotide SE |
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| c 566 | 10.4 | 7.5 | 13 | 1 | ABC40891 | Oligonucleotide SE |
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| c 568 | 10.4 | 7.5 | 13 | 1 | ABC44245 | Oligonucleotide SE |
| c 569 | 10.4 | 7.5 | 13 | 1 | ABC46624 | Oligonucleotide SE |
| 570 | 10.4 | 7.5 | 13 | 1 | ABC46625 | Oligonucleotide SE |
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| c 577 | 10.4 | 7.5 | 13 | 1 | ABC49574 | Oligonucleotide SE |
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| 615 | 10.4 | 7.5 | 13 | 1 | ABF11506 | Oligonucleotide SE |
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| 617 | 10.4 | 7.5 | 13 | 1 | ABF16774 | Oligonucleotide SE |
| c 618 | 10.4 | 7.5 | 13 | 1 | ABF16775 | Oligonucleotide SE |
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| c 620 | 10.4 | 7.5 | 13 | 1 | ABF18045 | Oligonucleotide SE |
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| c 622 | 10.4 | 7.5 | 13 | 1 | ABF18155 | Oligonucleotide SE |
| c 623 | 10.4 | 7.5 | 13 | 1 | ABF20156 | Oligonucleotide SE |
| 624 | 10.4 | 7.5 | 13 | 1 | ABF20157 | Oligonucleotide SE |
| 625 | 10.4 | 7.5 | 13 | 1 | ABF20794 | Oligonucleotide SE |
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| c 633 | 10.4 | 7.5 | 13 | 1 | ABF25382 | Oligonucleotide SE |
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| 635 | 10.4 | 7.5 | 13 | 1 | ABF25942 | Oligonucleotide SE |
| c 636 | 10.4 | 7.5 | 13 | 1 | ABF25943 | Oligonucleotide SE |
| 637 | 10.4 | 7.5 | 13 | 1 | ABF28968 | Oligonucleotide SE |
| c 638 | 10.4 | 7.5 | 13 | 1 | ABF28969 | Oligonucleotide SE |
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| c 642 | 10.4 | 7.5 | 13 | 1 | ABF32047 | Oligonucleotide SE |
| 643 | 10.4 | 7.5 | 13 | 1 | ABF32774 | Oligonucleotide SE |
| c 644 | 10.4 | 7.5 | 13 | 1 | ABF32775 | Oligonucleotide SE |
| 645 | 10.4 | 7.5 | 13 | 1 | ABF32776 | Oligonucleotide SE |
| c 646 | 10.4 | 7.5 | 13 | 1 | ABF32777 | Oligonucleotide SE |
| c 647 | 10.4 | 7.5 | 13 | 1 | ABF33958 | Oligonucleotide SE |
| 648 | 10.4 | 7.5 | 13 | 1 | ABF33959 | Oligonucleotide SE |
| 649 | 10.4 | 7.5 | 13 | 1 | ABF34098 | Oligonucleotide SE |
| c 650 | 10.4 | 7.5 | 13 | 1 | ABF34099 | Oligonucleotide SE |
| c 651 | 10.4 | 7.5 | 13 | 1 | ABF38484 | Oligonucleotide SE |
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| 653 | 10.4 | 7.5 | 13 | 1 | ABF39732 | Oligonucleotide SE |
| c 654 | 10.4 | 7.5 | 13 | 1 | ABF39733 | Oligonucleotide SE |
| 655 | 10.4 | 7.5 | 13 | 1 | ABF41114 | Oligonucleotide SE |
| c 656 | 10.4 | 7.5 | 13 | 1 | ABF41115 | Oligonucleotide SE |
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| 659 | 10.4 | 7.5 | 13 | 1 | ABF43820 | Oligonucleotide SE |
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| c 662 | 10.4 | 7.5 | 13 | 1 | ABF46003 | Oligonucleotide SE |
| c 663 | 10.4 | 7.5 | 13 | 1 | ABF51620 | Oligonucleotide SE |
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| 665 | 10.4 | 7.5 | 13 | 1 | ABF53250 | Oligonucleotide SE |
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| c 674 | 10.4 | 7.5 | 13 | 1 | ABF55723 | Oligonucleotide SE |
| c 675 | 10.4 | 7.5 | 13 | 1 | ABF58666 | Oligonucleotide SE |
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| c 678 | 10.4 | 7.5 | 13 | 1 | ABF61037 | Oligonucleotide SE |
| c 679 | 10.4 | 7.5 | 13 | 1 | ABF63800 | Oligonucleotide SE |
| 680 | 10.4 | 7.5 | 13 | 1 | ABF63801 | Oligonucleotide SE |
| 681 | 10.4 | 7.5 | 13 | 1 | ABF65198 | Oligonucleotide SE |
| c 682 | 10.4 | 7.5 | 13 | 1 | ABF65199 | Oligonucleotide SE |
| 683 | 10.4 | 7.5 | 13 | 1 | ABF66102 | Oligonucleotide SE |
| c 684 | 10.4 | 7.5 | 13 | 1 | ABF66103 | Oligonucleotide SE |
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| c 686 | 10.4 | 7.5 | 13 | 1 | ABF66673 | Oligonucleotide SE |
| c 687 | 10.4 | 7.5 | 13 | 1 | ABF73140 | Oligonucleotide SE |
| 688 | 10.4 | 7.5 | 13 | 1 | ABF73141 | Oligonucleotide SE |
| c 689 | 10.4 | 7.5 | 13 | 1 | ABF73144 | Oligonucleotide SE |
| 690 | 10.4 | 7.5 | 13 | 1 | ABF73145 | Oligonucleotide SE |

| | | | | | | |
|---|---|---|---|---|---|---|
| c 399 | 10.8 | 7.8 | 15 | 1 | AAF51266 | IGF-I oligonucleot |
| c 400 | 10.8 | 7.8 | 15 | 1 | AAF51267 | IGF-I oligonucleot |
| c 401 | 10.8 | 7.8 | 15 | 1 | AAF51268 | IGF-I oligonucleot |
| c 402 | 10.8 | 7.8 | 15 | 1 | AAF51269 | IGF-I oligonucleot |
| 403 | 10.8 | 7.8 | 15 | 1 | AAF51501 | IGF-I oligonucleot |
| 404 | 10.8 | 7.8 | 15 | 1 | AAF51502 | IGF-I oligonucleot |
| c 405 | 10.8 | 7.8 | 15 | 1 | AAF51598 | IGF-I oligonucleot |
| c 406 | 10.8 | 7.8 | 15 | 1 | AAF51599 | IGF-I oligonucleot |
| 407 | 10.8 | 7.8 | 15 | 1 | AAF52888 | IGF-I oligonucleot |
| 408 | 10.8 | 7.8 | 15 | 1 | AAF52892 | IGF-I oligonucleot |
| 409 | 10.8 | 7.8 | 15 | 1 | AAH49214 | Anti-c-Ha-ras olig |
| 410 | 10.8 | 7.8 | 15 | 1 | ABS97484 | Human epoxide hydr |
| 411 | 10.8 | 7.8 | 15 | 1 | AAL46735 | c-Ha-ras antisense |
| 412 | 10.8 | 7.8 | 15 | 1 | ABL01599 | c-Ha-ras targeted |
| 413 | 10.8 | 7.8 | 15 | 1 | ABA97499 | c-Ha-ras targeted |
| c 414 | 10.8 | 7.8 | 18 | 1 | AAA92609 | Antisense oligonuc |
| c 415 | 10.6 | 7.6 | 15 | 1 | ABN81420 | Human HTATIP allel |
| c 416 | 10.6 | 7.6 | 15 | 1 | ABN80551 | Human P450(cytochr |
| 417 | 10.4 | 7.5 | 12 | 1 | AAV28522 | Blackcurrant rever |
| 418 | 10.4 | 7.5 | 12 | 1 | ABH67931 | Oligonucleotide pr |
| c 419 | 10.4 | 7.5 | 12 | 1 | ABH69474 | Oligonucleotide pr |
| 420 | 10.4 | 7.5 | 12 | 1 | ABH71060 | Oligonucleotide pr |
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| 423 | 10.4 | 7.5 | 12 | 1 | ABH73848 | Oligonucleotide pr |
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| 425 | 10.4 | 7.5 | 12 | 1 | ABH74324 | Oligonucleotide pr |
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| c 427 | 10.4 | 7.5 | 12 | 1 | ABH77659 | Oligonucleotide pr |
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| 433 | 10.4 | 7.5 | 12 | 1 | ABH85010 | Oligonucleotide pr |
| c 434 | 10.4 | 7.5 | 12 | 1 | ABH86312 | Oligonucleotide pr |
| 435 | 10.4 | 7.5 | 12 | 1 | ABH87531 | Oligonucleotide pr |
| c 436 | 10.4 | 7.5 | 12 | 1 | ABH90089 | Oligonucleotide pr |
| 437 | 10.4 | 7.5 | 12 | 1 | ABH90546 | Oligonucleotide pr |
| c 438 | 10.4 | 7.5 | 12 | 1 | ABH91224 | Oligonucleotide pr |
| 439 | 10.4 | 7.5 | 12 | 1 | ABH91477 | Oligonucleotide pr |
| c 440 | 10.4 | 7.5 | 12 | 1 | ABH92015 | Oligonucleotide pr |
| c 441 | 10.4 | 7.5 | 12 | 1 | ABH92917 | Oligonucleotide pr |
| c 442 | 10.4 | 7.5 | 12 | 1 | ABH93219 | Oligonucleotide pr |
| c 443 | 10.4 | 7.5 | 12 | 1 | ABH93470 | Oligonucleotide pr |
| 444 | 10.4 | 7.5 | 12 | 1 | ABH94245 | Oligonucleotide pr |
| 445 | 10.4 | 7.5 | 12 | 1 | ABH95646 | Oligonucleotide pr |
| c 446 | 10.4 | 7.5 | 12 | 1 | ABH96180 | Oligonucleotide pr |
| c 447 | 10.4 | 7.5 | 12 | 1 | ABH96992 | Oligonucleotide pr |
| 448 | 10.4 | 7.5 | 12 | 1 | ABH98561 | Oligonucleotide pr |
| c 449 | 10.4 | 7.5 | 12 | 1 | ABH98748 | Oligonucleotide pr |
| c 450 | 10.4 | 7.5 | 12 | 1 | ABI00532 | Oligonucleotide pr |
| c 451 | 10.4 | 7.5 | 12 | 1 | ABI00799 | Oligonucleotide pr |
| 452 | 10.4 | 7.5 | 12 | 1 | ABI02394 | Oligonucleotide pr |
| 453 | 10.4 | 7.5 | 12 | 1 | ABI03256 | Oligonucleotide pr |
| c 454 | 10.4 | 7.5 | 12 | 1 | ABI03600 | Oligonucleotide pr |
| 455 | 10.4 | 7.5 | 12 | 1 | ABI03913 | Oligonucleotide pr |
| 456 | 10.4 | 7.5 | 12 | 1 | ABI05053 | Oligonucleotide pr |
| 457 | 10.4 | 7.5 | 12 | 1 | ABI05067 | Oligonucleotide pr |
| 458 | 10.4 | 7.5 | 12 | 1 | ABI06503 | Oligonucleotide pr |
| 459 | 10.4 | 7.5 | 12 | 1 | ABI06534 | Oligonucleotide pr |
| 460 | 10.4 | 7.5 | 12 | 1 | ABI07173 | Oligonucleotide pr |
| c 461 | 10.4 | 7.5 | 12 | 1 | ABI07435 | Oligonucleotide pr |
| c 462 | 10.4 | 7.5 | 12 | 1 | ABI08058 | Oligonucleotide pr |
| c 463 | 10.4 | 7.5 | 12 | 1 | ABI11679 | Oligonucleotide pr |
| 464 | 10.4 | 7.5 | 12 | 1 | ABI13369 | Oligonucleotide pr |
| c 465 | 10.4 | 7.5 | 12 | 1 | ABI13408 | Oligonucleotide pr |
| 466 | 10.4 | 7.5 | 12 | 1 | ABI13679 | Oligonucleotide pr |
| 467 | 10.4 | 7.5 | 12 | 1 | ABI13903 | Oligonucleotide pr |
| c 468 | 10.4 | 7.5 | 12 | 1 | ABI16026 | Oligonucleotide pr |
| 469 | 10.4 | 7.5 | 12 | 1 | ABI16174 | Oligonucleotide pr |
| 470 | 10.4 | 7.5 | 12 | 1 | ABI16484 | Oligonucleotide pr |
| 471 | 10.4 | 7.5 | 12 | 1 | ABI18149 | Oligonucleotide pr |
| c 472 | 10.4 | 7.5 | 12 | 1 | ABI18788 | Oligonucleotide pr |
| c 473 | 10.4 | 7.5 | 12 | 1 | ABI18906 | Oligonucleotide pr |
| 474 | 10.4 | 7.5 | 12 | 1 | ABI18936 | Oligonucleotide pr |
| 475 | 10.4 | 7.5 | 12 | 1 | ABI22425 | Oligonucleotide pr |
| c 476 | 10.4 | 7.5 | 12 | 1 | ABI24271 | Oligonucleotide pr |
| c 477 | 10.4 | 7.5 | 12 | 1 | ABI25117 | Oligonucleotide pr |
| 478 | 10.4 | 7.5 | 12 | 1 | ABI25200 | Oligonucleotide pr |
| 479 | 10.4 | 7.5 | 12 | 1 | ABI27537 | Oligonucleotide pr |
| 480 | 10.4 | 7.5 | 12 | 1 | ABI28296 | Oligonucleotide pr |
| c 481 | 10.4 | 7.5 | 12 | 1 | ABI28532 | Oligonucleotide pr |
| 482 | 10.4 | 7.5 | 12 | 1 | ABI28998 | Oligonucleotide pr |
| 483 | 10.4 | 7.5 | 12 | 1 | ABI30472 | Oligonucleotide pr |
| 484 | 10.4 | 7.5 | 12 | 1 | ABI32594 | Oligonucleotide pr |
| c 485 | 10.4 | 7.5 | 12 | 1 | ABI34755 | Oligonucleotide pr |
| 486 | 10.4 | 7.5 | 12 | 1 | ABI41618 | Oligonucleotide pr |
| c 487 | 10.4 | 7.5 | 12 | 1 | ABI42917 | Oligonucleotide pr |
| 488 | 10.4 | 7.5 | 12 | 1 | ABI43245 | Oligonucleotide pr |
| c 489 | 10.4 | 7.5 | 12 | 1 | ABI45398 | Oligonucleotide pr |
| c 490 | 10.4 | 7.5 | 12 | 1 | ABI45848 | Oligonucleotide pr |
| c 491 | 10.4 | 7.5 | 12 | 1 | ABI46421 | Oligonucleotide pr |
| c 492 | 10.4 | 7.5 | 12 | 1 | ABI46964 | Oligonucleotide pr |
| 493 | 10.4 | 7.5 | 12 | 1 | ABI48545 | Oligonucleotide pr |
| c 494 | 10.4 | 7.5 | 12 | 1 | ABI50037 | Oligonucleotide pr |
| c 495 | 10.4 | 7.5 | 12 | 1 | ABI50660 | Oligonucleotide pr |
| c 496 | 10.4 | 7.5 | 12 | 1 | ABI51466 | Oligonucleotide pr |
| 497 | 10.4 | 7.5 | 12 | 1 | ABI54852 | Oligonucleotide pr |
| 498 | 10.4 | 7.5 | 12 | 1 | ABI55339 | Oligonucleotide pr |
| 499 | 10.4 | 7.5 | 12 | 1 | ABI55710 | Oligonucleotide pr |
| c 500 | 10.4 | 7.5 | 12 | 1 | ABI58975 | Oligonucleotide pr |
| c 501 | 10.4 | 7.5 | 12 | 1 | ABI61446 | Oligonucleotide pr |
| 502 | 10.4 | 7.5 | 12 | 1 | ABI63114 | Oligonucleotide pr |
| c 503 | 10.4 | 7.5 | 12 | 1 | ABI63218 | Oligonucleotide pr |
| c 504 | 10.4 | 7.5 | 12 | 1 | ABI66422 | Oligonucleotide pr |
| c 505 | 10.4 | 7.5 | 12 | 1 | ABI66749 | Oligonucleotide pr |
| c 506 | 10.4 | 7.5 | 12 | 1 | ABI66750 | Oligonucleotide pr |
| c 507 | 10.4 | 7.5 | 12 | 1 | ABI67505 | Oligonucleotide pr |
| 508 | 10.4 | 7.5 | 12 | 1 | ABI68217 | Oligonucleotide pr |
| 509 | 10.4 | 7.5 | 12 | 1 | ABI68275 | Oligonucleotide pr |
| 510 | 10.4 | 7.5 | 12 | 1 | ABI69091 | Oligonucleotide pr |
| c 511 | 10.4 | 7.5 | 12 | 1 | ABI69250 | Oligonucleotide pr |
| 512 | 10.4 | 7.5 | 12 | 1 | ABI70995 | Oligonucleotide pr |
| c 513 | 10.4 | 7.5 | 12 | 1 | ABI71189 | Oligonucleotide pr |
| c 514 | 10.4 | 7.5 | 12 | 1 | ABI71584 | Oligonucleotide pr |
| 515 | 10.4 | 7.5 | 12 | 1 | ABI73215 | Oligonucleotide pr |
| c 516 | 10.4 | 7.5 | 12 | 1 | ABI74121 | Oligonucleotide pr |
| c 517 | 10.4 | 7.5 | 12 | 1 | ABI76760 | Oligonucleotide pr |
| c 518 | 10.4 | 7.5 | 12 | 1 | ABI79597 | Oligonucleotide pr |
| 519 | 10.4 | 7.5 | 12 | 1 | ABI80271 | Oligonucleotide pr |
| c 520 | 10.4 | 7.5 | 12 | 1 | ABI81369 | Oligonucleotide pr |
| 521 | 10.4 | 7.5 | 12 | 1 | ABI81529 | Oligonucleotide pr |
| 522 | 10.4 | 7.5 | 13 | 1 | AAZ93102 | 5'UTR sequence use |
| 523 | 10.4 | 7.5 | 13 | 1 | ABC00210 | Oligonucleotide SE |
| c 524 | 10.4 | 7.5 | 13 | 1 | ABC00211 | Oligonucleotide SE |
| 525 | 10.4 | 7.5 | 13 | 1 | ABC00338 | Oligonucleotide SE |
| c 526 | 10.4 | 7.5 | 13 | 1 | ABC00339 | Oligonucleotide SE |
| c 527 | 10.4 | 7.5 | 13 | 1 | ABC02828 | Oligonucleotide SE |
| 528 | 10.4 | 7.5 | 13 | 1 | ABC02829 | Oligonucleotide SE |
| c 529 | 10.4 | 7.5 | 13 | 1 | ABC04730 | Oligonucleotide SE |
| 530 | 10.4 | 7.5 | 13 | 1 | ABC04731 | Oligonucleotide SE |
| 531 | 10.4 | 7.5 | 13 | 1 | ABC05020 | Oligonucleotide SE |
| c 532 | 10.4 | 7.5 | 13 | 1 | ABC05021 | Oligonucleotide SE |
| c 533 | 10.4 | 7.5 | 13 | 1 | ABC09988 | Oligonucleotide SE |
| 534 | 10.4 | 7.5 | 13 | 1 | ABC09989 | Oligonucleotide SE |
| 535 | 10.4 | 7.5 | 13 | 1 | ABC11714 | Oligonucleotide SE |
| c 536 | 10.4 | 7.5 | 13 | 1 | ABC11715 | Oligonucleotide SE |
| c 537 | 10.4 | 7.5 | 13 | 1 | ABC14558 | Oligonucleotide SE |
| 538 | 10.4 | 7.5 | 13 | 1 | ABC14559 | Oligonucleotide SE |
| 539 | 10.4 | 7.5 | 13 | 1 | ABC16398 | Oligonucleotide SE |
| c 540 | 10.4 | 7.5 | 13 | 1 | ABC16399 | Oligonucleotide SE |
| c 541 | 10.4 | 7.5 | 13 | 1 | ABC19752 | Oligonucleotide SE |
| 542 | 10.4 | 7.5 | 13 | 1 | ABC19753 | Oligonucleotide SE |
| c 543 | 10.4 | 7.5 | 13 | 1 | ABC24272 | Oligonucleotide SE |
| 544 | 10.4 | 7.5 | 13 | 1 | ABC24273 | Oligonucleotide SE |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 253 | 11.4 | 8.2 | 15 | 1 | AAZ62841 | Substrate for HH r |
| c | 254 | 11.4 | 8.2 | 15 | 1 | AAF47175 | IGFBP3 oligonucleo |
| | 255 | 11.4 | 8.2 | 15 | 1 | AAF51493 | IGF-I oligonucleot |
| | 256 | 11.4 | 8.2 | 15 | 1 | AAF51494 | IGF-I oligonucleot |
| | 257 | 11.4 | 8.2 | 15 | 1 | AAF51495 | IGF-I oligonucleot |
| c | 258 | 11.4 | 8.2 | 15 | 1 | AAF53419 | IGF-I oligonucleot |
| c | 259 | 11.4 | 8.2 | 15 | 1 | AAF53420 | IGF-I oligonucleot |
| c | 260 | 11.4 | 8.2 | 15 | 1 | AAF53421 | IGF-I oligonucleot |
| | 261 | 11.4 | 8.2 | 15 | 1 | AAF53669 | IGF-I oligonucleot |
| | 262 | 11.4 | 8.2 | 15 | 1 | AAF53670 | IGF-I oligonucleot |
| | 263 | 11.4 | 8.2 | 15 | 1 | AAF53671 | IGF-I oligonucleot |
| | 264 | 11.4 | 8.2 | 15 | 1 | ABV99783 | Human PFKFB2 allel |
| | 265 | 11.4 | 8.2 | 15 | 1 | ABX00692 | Hepatitis C virus |
| c | 266 | 11.4 | 8.2 | 15 | 1 | ABK96301 | EDG1 gene allele-s |
| c | 267 | 11.4 | 8.2 | 15 | 1 | ABK81430 | SCYA20 allele spec |
| c | 268 | 11.4 | 8.2 | 15 | 1 | ABL52104 | Human PER1 allele |
| c | 269 | 11.4 | 8.2 | 15 | 1 | ABK12736 | ASO probe #1, used |
| c | 270 | 11.4 | 8.2 | 15 | 1 | AAL45302 | Human KCNB1 gene a |
| c | 271 | 11.4 | 8.2 | 15 | 1 | ABL01115 | Human AKR1B1 gene |
| | 272 | 11.4 | 8.2 | 15 | 1 | AAD25425 | Human GNRH2 gene p |
| c | 273 | 11.4 | 8.2 | 15 | 1 | AAS16721 | Human APOA4 allele |
| c | 274 | 11.4 | 8.2 | 15 | 1 | ABK29978 | Hepatitis B virus |
| | 275 | 11.4 | 8.2 | 15 | 1 | AAD53520 | Human GNRH2 gene p |
| c | 276 | 11.4 | 8.2 | 16 | 1 | AAQ29804 | B allele probe SN2 |
| | 277 | 11.4 | 8.2 | 16 | 1 | AAQ40622 | Hypervariable regi |
| c | 278 | 11.2 | 8.1 | 16 | 1 | AAQ29793 | A allele probe VP5 |
| c | 279 | 11.2 | 8.1 | 16 | 1 | AAQ29795 | A allele probe VP5 |
| | 280 | 11.2 | 8.1 | 16 | 1 | AAQ52859 | Cytomegalovirus ta |
| c | 281 | 11.2 | 8.1 | 16 | 1 | AAA74719 | Mycobacterium BCG |
| | 282 | 11.2 | 8.1 | 16 | 1 | AAS56873 | Validation ribozym |
| c | 283 | 11.2 | 8.1 | 16 | 1 | ABZ34019 | HIV-1 reverse tran |
| c | 284 | 11.2 | 8.1 | 16 | 1 | AAI68609 | ICAM-1 triple heli |
| c | 285 | 11.2 | 8.1 | 17 | 1 | ABZ65014 | Human HER2 DNAzyme |
| c | 286 | 11.2 | 8.1 | 18 | 1 | AAA92575 | Antisense oligonuc |
| | 287 | 11 | 7.9 | 11 | 1 | ABV62361 | Human skin EST 147 |
| | 288 | 11 | 7.9 | 11 | 1 | ABV69782 | Human skin EST 756 |
| | 289 | 11 | 7.9 | 12 | 1 | ABH74564 | Oligonucleotide pr |
| | 290 | 11 | 7.9 | 12 | 1 | ABH98049 | Oligonucleotide pr |
| | 291 | 11 | 7.9 | 12 | 1 | ABI01113 | Oligonucleotide pr |
| | 292 | 11 | 7.9 | 12 | 1 | ABI08693 | Oligonucleotide pr |
| c | 293 | 11 | 7.9 | 12 | 1 | ABI33606 | Oligonucleotide pr |
| | 294 | 11 | 7.9 | 12 | 1 | ABI40118 | Oligonucleotide pr |
| | 295 | 11 | 7.9 | 12 | 1 | ABI53626 | Oligonucleotide pr |
| c | 296 | 11 | 7.9 | 12 | 1 | ABI58915 | Oligonucleotide pr |
| | 297 | 11 | 7.9 | 12 | 1 | ABI59814 | Oligonucleotide pr |
| c | 298 | 11 | 7.9 | 12 | 1 | ABI65852 | Oligonucleotide pr |
| | 299 | 11 | 7.9 | 12 | 1 | ABI68036 | Oligonucleotide pr |
| c | 300 | 11 | 7.9 | 12 | 1 | ABI77791 | Oligonucleotide pr |
| c | 301 | 11 | 7.9 | 12 | 1 | ABI81002 | Oligonucleotide pr |
| | 302 | 11 | 7.9 | 13 | 1 | ABC21702 | Oligonucleotide SE |
| c | 303 | 11 | 7.9 | 13 | 1 | ABC21703 | Oligonucleotide SE |
| | 304 | 11 | 7.9 | 13 | 1 | ABC33136 | Oligonucleotide SE |
| c | 305 | 11 | 7.9 | 13 | 1 | ABC33137 | Oligonucleotide SE |
| c | 306 | 11 | 7.9 | 13 | 1 | ABC37622 | Oligonucleotide SE |
| | 307 | 11 | 7.9 | 13 | 1 | ABC37623 | Oligonucleotide SE |
| c | 308 | 11 | 7.9 | 13 | 1 | ABC46634 | Oligonucleotide SE |
| | 309 | 11 | 7.9 | 13 | 1 | ABC46635 | Oligonucleotide SE |
| | 310 | 11 | 7.9 | 13 | 1 | ABC61028 | Oligonucleotide SE |
| c | 311 | 11 | 7.9 | 13 | 1 | ABC61029 | Oligonucleotide SE |
| c | 312 | 11 | 7.9 | 13 | 1 | ABC82520 | Oligonucleotide SE |
| | 313 | 11 | 7.9 | 13 | 1 | ABC82521 | Oligonucleotide SE |
| | 314 | 11 | 7.9 | 13 | 1 | ABF15180 | Oligonucleotide SE |
| c | 315 | 11 | 7.9 | 13 | 1 | ABF15181 | Oligonucleotide SE |
| | 316 | 11 | 7.9 | 13 | 1 | ABF15420 | Oligonucleotide SE |
| c | 317 | 11 | 7.9 | 13 | 1 | ABF15421 | Oligonucleotide SE |
| c | 318 | 11 | 7.9 | 13 | 1 | ABF22698 | Oligonucleotide SE |
| | 319 | 11 | 7.9 | 13 | 1 | ABF22699 | Oligonucleotide SE |
| c | 320 | 11 | 7.9 | 13 | 1 | ABF28976 | Oligonucleotide SE |
| | 321 | 11 | 7.9 | 13 | 1 | ABF28977 | Oligonucleotide SE |
| | 322 | 11 | 7.9 | 13 | 1 | ABF35840 | Oligonucleotide SE |
| c | 323 | 11 | 7.9 | 13 | 1 | ABF35841 | Oligonucleotide SE |
| | 324 | 11 | 7.9 | 13 | 1 | ABF35842 | Oligonucleotide SE |
| c | 325 | 11 | 7.9 | 13 | 1 | ABF35843 | Oligonucleotide SE |
| | 326 | 11 | 7.9 | 13 | 1 | ABF46426 | Oligonucleotide SE |
| c | 327 | 11 | 7.9 | 13 | 1 | ABF46427 | Oligonucleotide SE |
| | 328 | 11 | 7.9 | 13 | 1 | ABF84270 | Oligonucleotide SE |
| c | 329 | 11 | 7.9 | 13 | 1 | ABF84271 | Oligonucleotide SE |
| | 330 | 11 | 7.9 | 13 | 1 | ABF86040 | Oligonucleotide SE |
| c | 331 | 11 | 7.9 | 13 | 1 | ABF86041 | Oligonucleotide SE |
| c | 332 | 11 | 7.9 | 13 | 1 | ABF98562 | Oligonucleotide SE |
| | 333 | 11 | 7.9 | 13 | 1 | ABF98563 | Oligonucleotide SE |
| c | 334 | 11 | 7.9 | 13 | 1 | ABH01584 | Oligonucleotide SE |
| | 335 | 11 | 7.9 | 13 | 1 | ABH01585 | Oligonucleotide SE |
| | 336 | 11 | 7.9 | 13 | 1 | ABH05406 | Oligonucleotide SE |
| c | 337 | 11 | 7.9 | 13 | 1 | ABH05407 | Oligonucleotide SE |
| | 338 | 11 | 7.9 | 13 | 1 | ABH08492 | Oligonucleotide SE |
| c | 339 | 11 | 7.9 | 13 | 1 | ABH08493 | Oligonucleotide SE |
| | 340 | 11 | 7.9 | 13 | 1 | ABH19250 | Oligonucleotide SE |
| c | 341 | 11 | 7.9 | 13 | 1 | ABH19251 | Oligonucleotide SE |
| c | 342 | 11 | 7.9 | 13 | 1 | ABH21128 | Oligonucleotide SE |
| | 343 | 11 | 7.9 | 13 | 1 | ABH21129 | Oligonucleotide SE |
| | 344 | 11 | 7.9 | 13 | 1 | ABH22016 | Oligonucleotide SE |
| c | 345 | 11 | 7.9 | 13 | 1 | ABH22017 | Oligonucleotide SE |
| | 346 | 11 | 7.9 | 13 | 1 | ABH30528 | Oligonucleotide SE |
| c | 347 | 11 | 7.9 | 13 | 1 | ABH30529 | Oligonucleotide SE |
| c | 348 | 11 | 7.9 | 13 | 1 | ABH31314 | Oligonucleotide SE |
| | 349 | 11 | 7.9 | 13 | 1 | ABH31315 | Oligonucleotide SE |
| | 350 | 11 | 7.9 | 13 | 1 | ABH35638 | Oligonucleotide SE |
| c | 351 | 11 | 7.9 | 13 | 1 | ABH35639 | Oligonucleotide SE |
| c | 352 | 11 | 7.9 | 14 | 1 | AAF29395 | Oligonucleotide pr |
| | 353 | 11 | 7.9 | 15 | 1 | AAV31919 | Peptide nucleic ac |
| | 354 | 11 | 7.9 | 15 | 1 | AAX31800 | Transcript tag seq |
| | 355 | 11 | 7.9 | 15 | 1 | AAX31164 | Tag sequence of a |
| c | 356 | 11 | 7.9 | 15 | 1 | AAI67293 | Human FKBP8 allele |
| | 357 | 11 | 7.9 | 15 | 1 | AAF50721 | IGF-I oligonucleot |
| | 358 | 11 | 7.9 | 15 | 1 | AAF50722 | IGF-I oligonucleot |
| | 359 | 11 | 7.9 | 15 | 1 | AAF50723 | IGF-I oligonucleot |
| | 360 | 11 | 7.9 | 15 | 1 | AAF50724 | IGF-I oligonucleot |
| | 361 | 11 | 7.9 | 15 | 1 | AAF50725 | IGF-I oligonucleot |
| c | 362 | 11 | 7.9 | 15 | 1 | AAL39485 | CCBP2 detecting AS |
| | 363 | 11 | 7.9 | 15 | 1 | ABK92567 | ASO primer #4 to d |
| | 364 | 11 | 7.9 | 15 | 1 | ABK92619 | ASO primer #17 to |
| c | 365 | 11 | 7.9 | 15 | 1 | AAS98658 | Colony stimulating |
| | 366 | 11 | 7.9 | 15 | 1 | ABK32117 | Human colon cancer |
| | 367 | 11 | 7.9 | 15 | 1 | ABK32754 | Human colorectal a |
| c | 368 | 10.8 | 7.8 | 14 | 1 | AAQ74120 | Platelet derived g |
| | 369 | 10.8 | 7.8 | 14 | 1 | AAT98896 | Probe 41w18 for HI |
| | 370 | 10.8 | 7.8 | 14 | 1 | AAX55199 | Multiple antisense |
| | 371 | 10.8 | 7.8 | 14 | 1 | AAX14792 | Triple helix formi |
| | 372 | 10.8 | 7.8 | 14 | 1 | AAF20768 | Human multiple tar |
| | 373 | 10.8 | 7.8 | 14 | 1 | AAF21471 | Human multiple tar |
| | 374 | 10.8 | 7.8 | 14 | 1 | AAA34646 | Human adenosine re |
| c | 375 | 10.8 | 7.8 | 15 | 1 | AAQ22446 | Probe (6) for DNA |
| | 376 | 10.8 | 7.8 | 15 | 1 | AAQ45774 | Human prostate tra |
| c | 377 | 10.8 | 7.8 | 15 | 1 | AAT56203 | Mouse TNF-a hammer |
| | 378 | 10.8 | 7.8 | 15 | 1 | AAT44432 | Antisense oligonuc |
| | 379 | 10.8 | 7.8 | 15 | 1 | AAQ97685 | Biotinylated antis |
| | 380 | 10.8 | 7.8 | 15 | 1 | AAQ88720 | c-Ha-ras modified |
| | 381 | 10.8 | 7.8 | 15 | 1 | AAX66553 | Human CD40 hammerh |
| | 382 | 10.8 | 7.8 | 15 | 1 | AAX24191 | Phosphonomonoester |
| | 383 | 10.8 | 7.8 | 15 | 1 | AAX33907 | c-Ha-ras expressio |
| | 384 | 10.8 | 7.8 | 15 | 1 | AAT44237 | c-Ha-ras antisense |
| c | 385 | 10.8 | 7.8 | 15 | 1 | AAT50229 | Rabbit CETP HH rib |
| c | 386 | 10.8 | 7.8 | 15 | 1 | AAT50231 | Rabbit CETP HH rib |
| | 387 | 10.8 | 7.8 | 15 | 1 | AAT14843 | Human prostatic tr |
| c | 388 | 10.8 | 7.8 | 15 | 1 | AAV48892 | c-fos gene antisen |
| | 389 | 10.8 | 7.8 | 15 | 1 | AAZ10279 | Primer ZC4048 used |
| c | 390 | 10.8 | 7.8 | 15 | 1 | AAS04346 | Human DAXX DNA all |
| c | 391 | 10.8 | 7.8 | 15 | 1 | AAS04348 | Human DAXX DNA all |
| | 392 | 10.8 | 7.8 | 15 | 1 | AAF60907 | Anti-c-Ha-ras olig |
| c | 393 | 10.8 | 7.8 | 15 | 1 | AAF69487 | Human IL4Ralpha ge |
| | 394 | 10.8 | 7.8 | 15 | 1 | AAF69956 | Human TNFRSF11B ge |
| c | 395 | 10.8 | 7.8 | 15 | 1 | AAF45991 | IGFBP2 oligonucleo |
| c | 396 | 10.8 | 7.8 | 15 | 1 | AAF45992 | IGFBP2 oligonucleo |
| c | 397 | 10.8 | 7.8 | 15 | 1 | AAF47173 | IGFBP3 oligonucleo |
| c | 398 | 10.8 | 7.8 | 15 | 1 | AAF47177 | IGFBP3 oligonucleo |

| | | | | | | |
|---|---|---|---|---|---|---|
| c 107 | 12.2 | 8.8 | 17 | 1 | AAF01989 | Hammerhead ribozym |
| 108 | 12.2 | 8.8 | 17 | 1 | AAA55987 | Murine G713 amplif |
| 109 | 12.2 | 8.8 | 17 | 1 | AAA24962 | Oestrogen receptor |
| 110 | 12.2 | 8.8 | 17 | 1 | ABK00576 | Human NOGO Hammerh |
| 111 | 12.2 | 8.8 | 17 | 1 | ABV79506 | Human HTPL scannin |
| 112 | 12.2 | 8.8 | 17 | 1 | ABV90893 | Human POSHL1 scann |
| 113 | 12.2 | 8.8 | 17 | 1 | ABV90895 | Human POSHL1 scann |
| 114 | 12.2 | 8.8 | 17 | 1 | ABV90899 | Human POSHL1 scann |
| c 115 | 12.2 | 8.8 | 17 | 1 | ABV91049 | Human POSHL1 scann |
| c 116 | 12.2 | 8.8 | 17 | 1 | ABV91050 | Human POSHL1 scann |
| 117 | 12.2 | 8.8 | 17 | 1 | ABK97683 | Cytochrome P450 3A |
| 118 | 12.2 | 8.8 | 17 | 1 | ABN00535 | Human GDMLP-1 17-m |
| 119 | 12.2 | 8.8 | 17 | 1 | ABN00536 | Human GDMLP-1 17-m |
| c 120 | 12.2 | 8.8 | 17 | 1 | ABN01272 | Human GDMLP-1 17-m |
| 121 | 12.2 | 8.8 | 17 | 1 | ABN07839 | Human GDMLP-1 17-m |
| c 122 | 12.2 | 8.8 | 17 | 1 | ABN09666 | Human GDMLP-1 17-m |
| c 123 | 12.2 | 8.8 | 17 | 1 | ABT34389 | Tumour suppression |
| 124 | 12.2 | 8.8 | 17 | 1 | ABT40165 | Tumour suppression |
| 125 | 12.2 | 8.8 | 17 | 1 | ACA07738 | NFKB sub-unit modu |
| c 126 | 12.2 | 8.8 | 17 | 1 | ACA09102 | NFKB sub-unit modu |
| c 127 | 12.2 | 8.8 | 17 | 1 | ACA09103 | NFKB sub-unit modu |
| 128 | 12.2 | 8.8 | 17 | 1 | ABZ65014 | Human HER2 DNAzyme |
| c 129 | 12.2 | 8.8 | 18 | 1 | AAA92642 | Antisense oligonuc |
| 130 | 12.2 | 8.8 | 21 | 1 | AAI66686 | Human CETP DNA rel |
| 131 | 12 | 8.6 | 12 | 1 | ABH80452 | Oligonucleotide pr |
| c 132 | 12 | 8.6 | 12 | 1 | ABH93471 | Oligonucleotide pr |
| c 133 | 12 | 8.6 | 12 | 1 | ABI12177 | Oligonucleotide pr |
| 134 | 12 | 8.6 | 13 | 1 | ABC05018 | Oligonucleotide SE |
| c 135 | 12 | 8.6 | 13 | 1 | ABC05019 | Oligonucleotide SE |
| 136 | 12 | 8.6 | 13 | 1 | ABC63272 | Oligonucleotide SE |
| c 137 | 12 | 8.6 | 13 | 1 | ABC63273 | Oligonucleotide SE |
| 138 | 12 | 8.6 | 13 | 1 | ABC84320 | Oligonucleotide SE |
| c 139 | 12 | 8.6 | 13 | 1 | ABC84321 | Oligonucleotide SE |
| 140 | 12 | 8.6 | 13 | 1 | ABF24344 | Oligonucleotide SE |
| c 141 | 12 | 8.6 | 13 | 1 | ABF24345 | Oligonucleotide SE |
| 142 | 12 | 8.6 | 13 | 1 | ABF95704 | Oligonucleotide SE |
| c 143 | 12 | 8.6 | 13 | 1 | ABF95705 | Oligonucleotide SE |
| 144 | 12 | 8.6 | 13 | 1 | ABH00388 | Oligonucleotide SE |
| c 145 | 12 | 8.6 | 13 | 1 | ABH00389 | Oligonucleotide SE |
| 146 | 12 | 8.6 | 13 | 1 | ABH47624 | Oligonucleotide SE |
| c 147 | 12 | 8.6 | 13 | 1 | ABH47625 | Oligonucleotide SE |
| 148 | 12 | 8.6 | 15 | 1 | ABL52231 | Human PHKG2 allele |
| c 149 | 12 | 8.6 | 15 | 1 | AAD26061 | Human apolipoprote |
| 150 | 12 | 8.6 | 15 | 1 | AAS98750 | Colony stimulating |
| 151 | 12 | 8.6 | 16 | 1 | AAL44022 | Human cytochrome P |
| c 152 | 12 | 8.6 | 17 | 1 | AAF02799 | Hammerhead ribozym |
| 153 | 12 | 8.6 | 17 | 1 | ABV90232 | Human POSHL1 scann |
| 154 | 12 | 8.6 | 17 | 1 | ABV90233 | Human POSHL1 scann |
| 155 | 12 | 8.6 | 17 | 1 | ABV90234 | Human POSHL1 scann |
| 156 | 12 | 8.6 | 17 | 1 | ABV90235 | Human POSHL1 scann |
| 157 | 12 | 8.6 | 17 | 1 | ABV90236 | Human POSHL1 scann |
| 158 | 12 | 8.6 | 17 | 1 | ABV90237 | Human POSHL1 scann |
| c 159 | 11.8 | 8.5 | 15 | 1 | AAQ50548 | Human chromosome 6 |
| c 160 | 11.8 | 8.5 | 15 | 1 | AAT89133 | Lutetium texaphyri |
| c 161 | 11.8 | 8.5 | 15 | 1 | AAT65005 | Human chromosome 6 |
| 162 | 11.8 | 8.5 | 15 | 1 | AAT98897 | Probe 41w19 for HI |
| c 163 | 11.8 | 8.5 | 15 | 1 | AAV54266 | Primer KC155 used |
| c 164 | 11.8 | 8.5 | 15 | 1 | AAV07304 | Metallotexaphyrin- |
| c 165 | 11.8 | 8.5 | 15 | 1 | AAX55348 | Soluble sc-TCR fus |
| c 166 | 11.8 | 8.5 | 15 | 1 | AAA66971 | Human leukocyte an |
| c 167 | 11.8 | 8.5 | 15 | 1 | AAF47174 | IGFBP3 oligonucleo |
| c 168 | 11.8 | 8.5 | 15 | 1 | AAF47176 | IGFBP3 oligonucleo |
| 169 | 11.8 | 8.5 | 15 | 1 | AAF52889 | IGF-I oligonucleot |
| 170 | 11.8 | 8.5 | 15 | 1 | AAF52890 | IGF-I oligonucleot |
| 171 | 11.8 | 8.5 | 15 | 1 | AAF52891 | IGF-I oligonucleot |
| 172 | 11.8 | 8.5 | 15 | 1 | ABV99795 | Human PFKFB2 allel |
| c 173 | 11.8 | 8.5 | 15 | 1 | AAS99376 | Aldehyde dehydroge |
| c 174 | 11.8 | 8.5 | 16 | 1 | AAQ91451 | Dysprosium (III) t |
| c 175 | 11.8 | 8.5 | 16 | 1 | AAV07300 | Metallotexaphyrin- |
| c 176 | 11.8 | 8.5 | 16 | 1 | AAV07038 | Texaphyrin oligonu |
| c 177 | 11.8 | 8.5 | 16 | 1 | AAZ88440 | Exemplary texaphyr |
| 178 | 11.8 | 8.5 | 16 | 1 | AAZ97664 | HIV-1 protease gen |
| 179 | 11.8 | 8.5 | 16 | 1 | ABT34281 | Opioid receptor D1 |
| 180 | 11.8 | 8.5 | 16 | 1 | ABX14989 | Human delta opioid |
| 181 | 11.6 | 8.3 | 13 | 1 | ABH66152 | Oligonucleotide SE |
| c 182 | 11.6 | 8.3 | 13 | 1 | ABH66153 | Oligonucleotide SE |
| 183 | 11.6 | 8.3 | 15 | 1 | AAZ44834 | H. annuus sldi hom |
| c 184 | 11.6 | 8.3 | 15 | 1 | ABN81456 | Human HTATIP allel |
| 185 | 11.6 | 8.3 | 15 | 1 | ABL36320 | Human lysosomal ac |
| c 186 | 11.4 | 8.2 | 13 | 1 | AAA06017 | CFTR gene analysis |
| c 187 | 11.4 | 8.2 | 13 | 1 | ABC08446 | Oligonucleotide SE |
| 188 | 11.4 | 8.2 | 13 | 1 | ABC08447 | Oligonucleotide SE |
| 189 | 11.4 | 8.2 | 13 | 1 | ABC16692 | Oligonucleotide SE |
| c 190 | 11.4 | 8.2 | 13 | 1 | ABC16693 | Oligonucleotide SE |
| 191 | 11.4 | 8.2 | 13 | 1 | ABC23224 | Oligonucleotide SE |
| c 192 | 11.4 | 8.2 | 13 | 1 | ABC23225 | Oligonucleotide SE |
| 193 | 11.4 | 8.2 | 13 | 1 | ABC25064 | Oligonucleotide SE |
| c 194 | 11.4 | 8.2 | 13 | 1 | ABC25065 | Oligonucleotide SE |
| c 195 | 11.4 | 8.2 | 13 | 1 | ABC25858 | Oligonucleotide SE |
| 196 | 11.4 | 8.2 | 13 | 1 | ABC25859 | Oligonucleotide SE |
| c 197 | 11.4 | 8.2 | 13 | 1 | ABC26848 | Oligonucleotide SE |
| 198 | 11.4 | 8.2 | 13 | 1 | ABC26849 | Oligonucleotide SE |
| c 199 | 11.4 | 8.2 | 13 | 1 | ABC38204 | Oligonucleotide SE |
| 200 | 11.4 | 8.2 | 13 | 1 | ABC38205 | Oligonucleotide SE |
| 201 | 11.4 | 8.2 | 13 | 1 | ABC47948 | Oligonucleotide SE |
| c 202 | 11.4 | 8.2 | 13 | 1 | ABC47949 | Oligonucleotide SE |
| c 203 | 11.4 | 8.2 | 13 | 1 | ABC49590 | Oligonucleotide SE |
| 204 | 11.4 | 8.2 | 13 | 1 | ABC49591 | Oligonucleotide SE |
| 205 | 11.4 | 8.2 | 13 | 1 | ABC62590 | Oligonucleotide SE |
| c 206 | 11.4 | 8.2 | 13 | 1 | ABC62591 | Oligonucleotide SE |
| c 207 | 11.4 | 8.2 | 13 | 1 | ABC62760 | Oligonucleotide SE |
| 208 | 11.4 | 8.2 | 13 | 1 | ABC62761 | Oligonucleotide SE |
| 209 | 11.4 | 8.2 | 13 | 1 | ABC65198 | Oligonucleotide SE |
| c 210 | 11.4 | 8.2 | 13 | 1 | ABC65199 | Oligonucleotide SE |
| c 211 | 11.4 | 8.2 | 13 | 1 | ABC70350 | Oligonucleotide SE |
| 212 | 11.4 | 8.2 | 13 | 1 | ABC70351 | Oligonucleotide SE |
| 213 | 11.4 | 8.2 | 13 | 1 | ABC84686 | Oligonucleotide SE |
| c 214 | 11.4 | 8.2 | 13 | 1 | ABC84687 | Oligonucleotide SE |
| c 215 | 11.4 | 8.2 | 13 | 1 | ABC84786 | Oligonucleotide SE |
| 216 | 11.4 | 8.2 | 13 | 1 | ABC84787 | Oligonucleotide SE |
| c 217 | 11.4 | 8.2 | 13 | 1 | ABC93112 | Oligonucleotide SE |
| 218 | 11.4 | 8.2 | 13 | 1 | ABC93113 | Oligonucleotide SE |
| c 219 | 11.4 | 8.2 | 13 | 1 | ABC93114 | Oligonucleotide SE |
| 220 | 11.4 | 8.2 | 13 | 1 | ABC93115 | Oligonucleotide SE |
| c 221 | 11.4 | 8.2 | 13 | 1 | ABC93116 | Oligonucleotide SE |
| 222 | 11.4 | 8.2 | 13 | 1 | ABC93117 | Oligonucleotide SE |
| 223 | 11.4 | 8.2 | 13 | 1 | ABF10342 | Oligonucleotide SE |
| c 224 | 11.4 | 8.2 | 13 | 1 | ABF10343 | Oligonucleotide SE |
| 225 | 11.4 | 8.2 | 13 | 1 | ABF10344 | Oligonucleotide SE |
| c 226 | 11.4 | 8.2 | 13 | 1 | ABF10345 | Oligonucleotide SE |
| c 227 | 11.4 | 8.2 | 13 | 1 | ABF15452 | Oligonucleotide SE |
| 228 | 11.4 | 8.2 | 13 | 1 | ABF15453 | Oligonucleotide SE |
| c 229 | 11.4 | 8.2 | 13 | 1 | ABF16652 | Oligonucleotide SE |
| 230 | 11.4 | 8.2 | 13 | 1 | ABF16653 | Oligonucleotide SE |
| c 231 | 11.4 | 8.2 | 13 | 1 | ABF19170 | Oligonucleotide SE |
| 232 | 11.4 | 8.2 | 13 | 1 | ABF19171 | Oligonucleotide SE |
| 233 | 11.4 | 8.2 | 13 | 1 | ABF19306 | Oligonucleotide SE |
| c 234 | 11.4 | 8.2 | 13 | 1 | ABF19307 | Oligonucleotide SE |
| c 235 | 11.4 | 8.2 | 13 | 1 | ABF36186 | Oligonucleotide SE |
| 236 | 11.4 | 8.2 | 13 | 1 | ABF36187 | Oligonucleotide SE |
| c 237 | 11.4 | 8.2 | 13 | 1 | ABF42168 | Oligonucleotide SE |
| 238 | 11.4 | 8.2 | 13 | 1 | ABF42169 | Oligonucleotide SE |
| c 239 | 11.4 | 8.2 | 13 | 1 | ABF42170 | Oligonucleotide SE |
| 240 | 11.4 | 8.2 | 13 | 1 | ABF42171 | Oligonucleotide SE |
| 241 | 11.4 | 8.2 | 13 | 1 | ABF62158 | Oligonucleotide SE |
| c 242 | 11.4 | 8.2 | 13 | 1 | ABF62159 | Oligonucleotide SE |
| c 243 | 11.4 | 8.2 | 13 | 1 | ABH33146 | Oligonucleotide SE |
| 244 | 11.4 | 8.2 | 13 | 1 | ABH33147 | Oligonucleotide SE |
| 245 | 11.4 | 8.2 | 13 | 1 | ABH57116 | Oligonucleotide SE |
| c 246 | 11.4 | 8.2 | 13 | 1 | ABH57117 | Oligonucleotide SE |
| 247 | 11.4 | 8.2 | 13 | 1 | ABH62596 | Oligonucleotide SE |
| c 248 | 11.4 | 8.2 | 13 | 1 | ABH62597 | Oligonucleotide SE |
| 249 | 11.4 | 8.2 | 14 | 1 | AAT98901 | Probe 41w32 for HI |
| 250 | 11.4 | 8.2 | 15 | 1 | AAQ74479 | Primer based on pl |
| 251 | 11.4 | 8.2 | 15 | 1 | AAT04287 | G. oxydans T100 L- |
| c 252 | 11.4 | 8.2 | 15 | 1 | AAQ80594 | M.tuberculosis 16S |

GenCore version 5.1.6


OM nucleic - nucleic search, using sw model

Run on: January 12, 2004, 13:48:01 ; Search time 1 Seconds
(without alignments)
2.878 Million cell updates/sec

Title: us-09-925-139-3
Perfect score: 139
Sequence: 1 ggatggggcttgtagcagaa.....ctatcctaaaggcccactgg 139

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 0.5

Searched: 739 seqs, 10352 residues

Total number of hits satisfying chosen parameters: 1478

Minimum DB seq length: 8
Maximum DB seq length: 50

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 790 summaries

Database : rng.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|---|
| c | 1 | 21 | 15.1 | 21 | 1 | AAI66686 | Human CETP DNA rel |
| c | 2 | 20 | 14.4 | 20 | 1 | ABT13031 | Human cholesterol |
| c | 3 | 20 | 14.4 | 20 | 1 | ABX12175 | Human cholesteryl |
| c | 4 | 20 | 14.4 | 20 | 1 | ABX12198 | Human cholesteryl |
| c | 5 | 20 | 14.4 | 20 | 1 | ABX12199 | Human cholesteryl |
| c | 6 | 20 | 14.4 | 20 | 1 | ABX12200 | Human cholesteryl |
| c | 7 | 20 | 14.4 | 20 | 1 | ABX12217 | Human cholesteryl |
| c | 8 | 20 | 14.4 | 20 | 1 | ABX12218 | Human cholesteryl |
| c | 9 | 20 | 14.4 | 20 | 1 | ABX12219 | Human cholesteryl |
| c | 10 | 20 | 14.4 | 20 | 1 | ABX12220 | Human cholesteryl |
| | 11 | 18 | 12.9 | 18 | 1 | AAT50642 | Human CETP hairpin |
| | 12 | 17.2 | 12.4 | 22 | 1 | AAX37644 | HBV detecting prim |
| c | 13 | 17 | 12.2 | 17 | 1 | AAX22550 | Human CETP RNA fra |
| | 14 | 16.8 | 12.1 | 21 | 1 | AAI99829 | Human G protein-co |
| | 15 | 16.2 | 11.7 | 22 | 1 | AAV52705 | Hepatocyte nuclear |
| | 16 | 15.2 | 10.9 | 20 | 1 | AAD24930 | Antisense primer, |
| | 17 | 15 | 10.8 | 15 | 1 | AAT49815 | Human CETP HH ribo |
| | 18 | 15 | 10.8 | 15 | 1 | AAT49817 | Human CETP HH ribo |
| | 19 | 15 | 10.8 | 15 | 1 | AAT49819 | Human CETP HH ribo |
| | 20 | 15 | 10.8 | 15 | 1 | AAT49821 | Human CETP HH ribo |
| | 21 | 15 | 10.8 | 15 | 1 | AAT49823 | Human CETP HH ribo |
| | 22 | 15 | 10.8 | 15 | 1 | AAT49825 | Human CETP HH ribo |
| | 23 | 15 | 10.8 | 15 | 1 | AAT49827 | Human CETP HH ribo |
| | 24 | 15 | 10.8 | 15 | 1 | AAT49829 | Human CETP HH ribo |
| | 25 | 15 | 10.8 | 15 | 1 | AAT49831 | Human CETP HH ribo |
| | 26 | 15 | 10.8 | 15 | 1 | AAT49833 | Human CETP HH ribo |
| | 27 | 15 | 10.8 | 15 | 1 | AAT49835 | Human CETP HH ribo |
| | 28 | 15 | 10.8 | 15 | 1 | AAT49837 | Human CETP HH ribo |
| | 29 | 15 | 10.8 | 15 | 1 | AAT49839 | Human CETP HH ribo |
| | 30 | 15 | 10.8 | 15 | 1 | AAT49841 | Human CETP HH ribo |
| | 31 | 15 | 10.8 | 15 | 1 | AAT49809 | Human CETP HH ribo |
| | 32 | 15 | 10.8 | 15 | 1 | AAT49811 | Human CETP HH ribo |
| | 33 | 15 | 10.8 | 15 | 1 | AAT49813 | Human CETP HH ribo |
| c | 34 | 14.8 | 10.6 | 20 | 1 | ABS60987 | Human genotyping P |
| | 35 | 14.4 | 10.4 | 18 | 1 | ABL58444 | Cyp-C probe genera |
| | 36 | 14.4 | 10.4 | 20 | 1 | ABZ31506 | Candida albicans G |
| c | 37 | 14.4 | 10.4 | 20 | 1 | ABV73609 | S. albulus plasmid |
| c | 38 | 14.4 | 10.4 | 20 | 1 | ABI93783 | Capture oligonucle |
| c | 39 | 14.2 | 10.2 | 20 | 1 | AAT08224 | p142, PCR primer u |
| c | 40 | 14.2 | 10.2 | 20 | 1 | AAQ81567 | Hepatitis B virus |
| c | 41 | 14.2 | 10.2 | 20 | 1 | AAQ80879 | Europium (III) tex |
| c | 42 | 14.2 | 10.2 | 20 | 1 | AAQ80880 | Europium (III) tex |
| c | 43 | 14.2 | 10.2 | 20 | 1 | AAQ91455 | Dysprosium (III) t |
| c | 44 | 14.2 | 10.2 | 20 | 1 | AAV07290 | Oligonucleotide #4 |
| c | 45 | 14.2 | 10.2 | 20 | 1 | AAV07037 | Texaphyrin oligonu |
| c | 46 | 14.2 | 10.2 | 20 | 1 | AAV99212 | Antisense primer f |
| c | 47 | 14.2 | 10.2 | 20 | 1 | AAZ88439 | Exemplary texaphyr |
| | 48 | 14.2 | 10.2 | 20 | 1 | AAD05958 | Human diacylglycer |
| c | 49 | 14.2 | 10.2 | 20 | 1 | AAD41746 | Human RECQL2 antis |
| c | 50 | 14.2 | 10.2 | 20 | 1 | ABT23628 | Stabilising reagen |
| | 51 | 14 | 10.1 | 20 | 1 | AAA58421 | Oct-4 transcript R |
| c | 52 | 13.8 | 9.9 | 17 | 1 | AAV91005 | Human C-raf target |
| c | 53 | 13.8 | 9.9 | 17 | 1 | AAV91006 | Human C-raf target |
| | 54 | 13.8 | 9.9 | 18 | 1 | AAX28045 | PCR primer for hum |
| | 55 | 13.4 | 9.6 | 18 | 1 | AAQ50940 | T-cell antigen rec |
| | 56 | 13.4 | 9.6 | 18 | 1 | ABL88809 | HIV-1 related bind |
| c | 57 | 13.4 | 9.6 | 19 | 1 | AAA82923 | cdk4 ribozyme bind |
| | 58 | 13.4 | 9.6 | 19 | 1 | AAA51763 | Primer to amplify |
| c | 59 | 13.4 | 9.6 | 19 | 1 | AAH58085 | Cell-cycle depende |
| c | 60 | 13.4 | 9.6 | 19 | 1 | ABL43426 | Human chromosome 1 |
| c | 61 | 13.4 | 9.6 | 19 | 1 | ABL43434 | Human chromosome 1 |
| c | 62 | 13.2 | 9.5 | 18 | 1 | AAT94803 | Human leukocyte an |
| c | 63 | 13.2 | 9.5 | 18 | 1 | AAT60161 | Collagen gene prom |
| | 64 | 13.2 | 9.5 | 18 | 1 | AAA92575 | Antisense oligonuc |
| | 65 | 13.2 | 9.5 | 18 | 1 | AAA10567 | Smad2 antisense ol |
| c | 66 | 13.2 | 9.5 | 18 | 1 | AAZ98709 | Collagen promoter |
| c | 67 | 13.2 | 9.5 | 18 | 1 | AAD20365 | Antisense oligo, I |
| c | 68 | 13.2 | 9.5 | 18 | 1 | AAD41916 | Human SRC-1 antise |
| c | 69 | 13.2 | 9.5 | 18 | 1 | ABA83557 | Mouse MP-1 antisen |
| c | 70 | 13.2 | 9.5 | 18 | 1 | ABL45037 | Human chromosome 1 |
| | 71 | 13 | 9.4 | 13 | 1 | ABC47950 | Oligonucleotide SE |
| c | 72 | 13 | 9.4 | 13 | 1 | ABC47951 | Oligonucleotide SE |
| c | 73 | 13 | 9.4 | 13 | 1 | ABF16654 | Oligonucleotide SE |
| | 74 | 13 | 9.4 | 13 | 1 | ABF16655 | Oligonucleotide SE |
| | 75 | 13 | 9.4 | 15 | 1 | AAT50323 | Rabbit CETP HH rib |
| c | 76 | 12.8 | 9.2 | 17 | 1 | AAQ91452 | Dysprosium (III) t |
| c | 77 | 12.8 | 9.2 | 17 | 1 | AAX75159 | Mouse flt-1 VEGF r |
| c | 78 | 12.8 | 9.2 | 17 | 1 | AAV07298 | Metallotexaphyrin- |
| c | 79 | 12.8 | 9.2 | 17 | 1 | AAV93414 | Human B-raf substr |
| c | 80 | 12.8 | 9.2 | 17 | 1 | AAV93413 | Human B-raf substr |
| c | 81 | 12.8 | 9.2 | 17 | 1 | AAV91007 | Human C-raf target |
| | 82 | 12.8 | 9.2 | 17 | 1 | AAA79844 | Hepatitis B virus |
| c | 83 | 12.8 | 9.2 | 17 | 1 | ABS97987 | Human urokinase ge |
| c | 84 | 12.8 | 9.2 | 17 | 1 | ABK17683 | Human ERG hammerhe |
| c | 85 | 12.8 | 9.2 | 17 | 1 | ABK18660 | Human ERG G-cleave |
| c | 86 | 12.8 | 9.2 | 17 | 1 | ABL31561 | Human HLA genotypi |
| c | 87 | 12.8 | 9.2 | 18 | 1 | AAQ91453 | Dysprosium (III) t |
| c | 88 | 12.8 | 9.2 | 18 | 1 | AAV07301 | Metallotexaphyrin- |
| | 89 | 12.8 | 9.2 | 18 | 1 | AAA92609 | Antisense oligonuc |
| | 90 | 12.8 | 9.2 | 18 | 1 | AAA92642 | Antisense oligonuc |
| | 91 | 12.6 | 9.1 | 13 | 1 | ABF35838 | Oligonucleotide SE |
| c | 92 | 12.6 | 9.1 | 13 | 1 | ABF35839 | Oligonucleotide SE |
| | 93 | 12.4 | 8.9 | 15 | 1 | AAQ34483 | Oligo 9, a PCR pri |
| | 94 | 12.4 | 8.9 | 15 | 1 | AAQ56245 | PCR primer for amp |
| c | 95 | 12.4 | 8.9 | 16 | 1 | AAQ29808 | B allele probe VP5 |
| c | 96 | 12.4 | 8.9 | 16 | 1 | AAT70569 | Haemoglobin G gamm |
| | 97 | 12.4 | 8.9 | 16 | 1 | AAC67540 | Alzheimer's diseas |
| c | 98 | 12.4 | 8.9 | 17 | 1 | AAQ29806 | B allele probe VP0 |
| | 99 | 12.4 | 8.9 | 17 | 1 | AAT14821 | Histiocyte-secrete |
| c | 100 | 12.4 | 8.9 | 17 | 1 | AAF02929 | Hammerhead ribozym |
| c | 101 | 12.4 | 8.9 | 17 | 1 | AAF02930 | Hammerhead ribozym |
| c | 102 | 12.4 | 8.9 | 17 | 1 | ABA80624 | APOE mutation corr |
| | 103 | 12.4 | 8.9 | 17 | 1 | ABA80625 | APOE mutation corr |
| | 104 | 12.2 | 8.8 | 17 | 1 | AAT03827 | HLA-C-clone 10 pol |
| c | 105 | 12.2 | 8.8 | 17 | 1 | AAV93415 | Human B-raf substr |
| | 106 | 12.2 | 8.8 | 17 | 1 | AAV91297 | Human C-raf target |